

NATION'S BUSINESS

NOVEMBER

1926



Our Congress is
Businesslike *by Nicholas
Longworth, Speaker of the House*



Chemistry is Overturning
Industry *by Williams Haynes*



Lumber Finds Widening
Markets *by Frank G. Wisner*

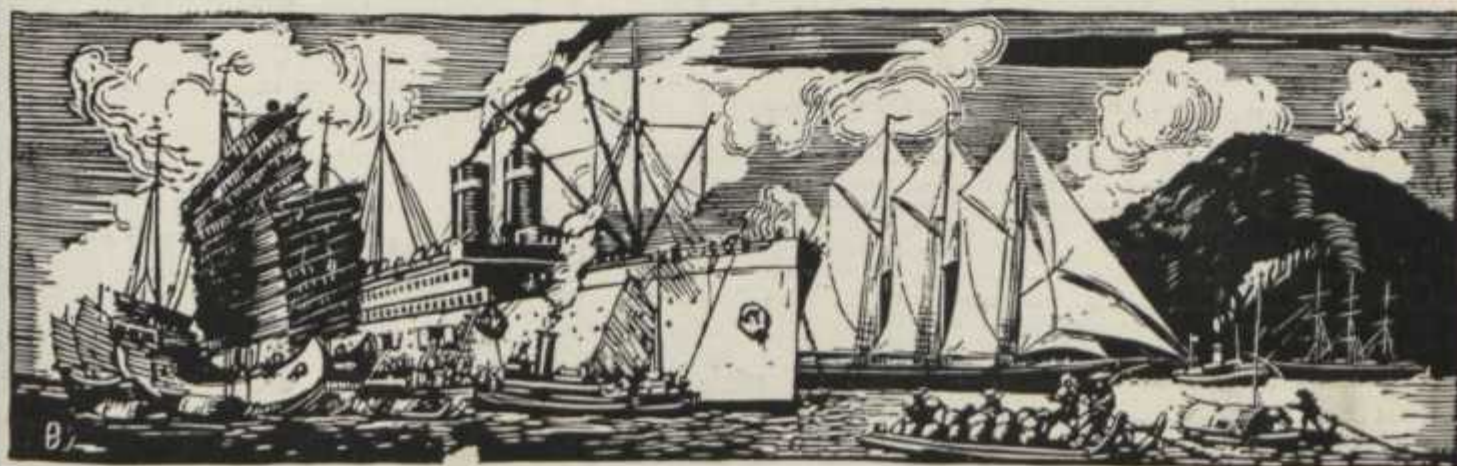
Parking and the Motor In-
dustry *by Walter P. Chrysler*



Why I Need the Federal
Reserve *by W. M. G. Howse*



Map of Nation's Business
Page 42



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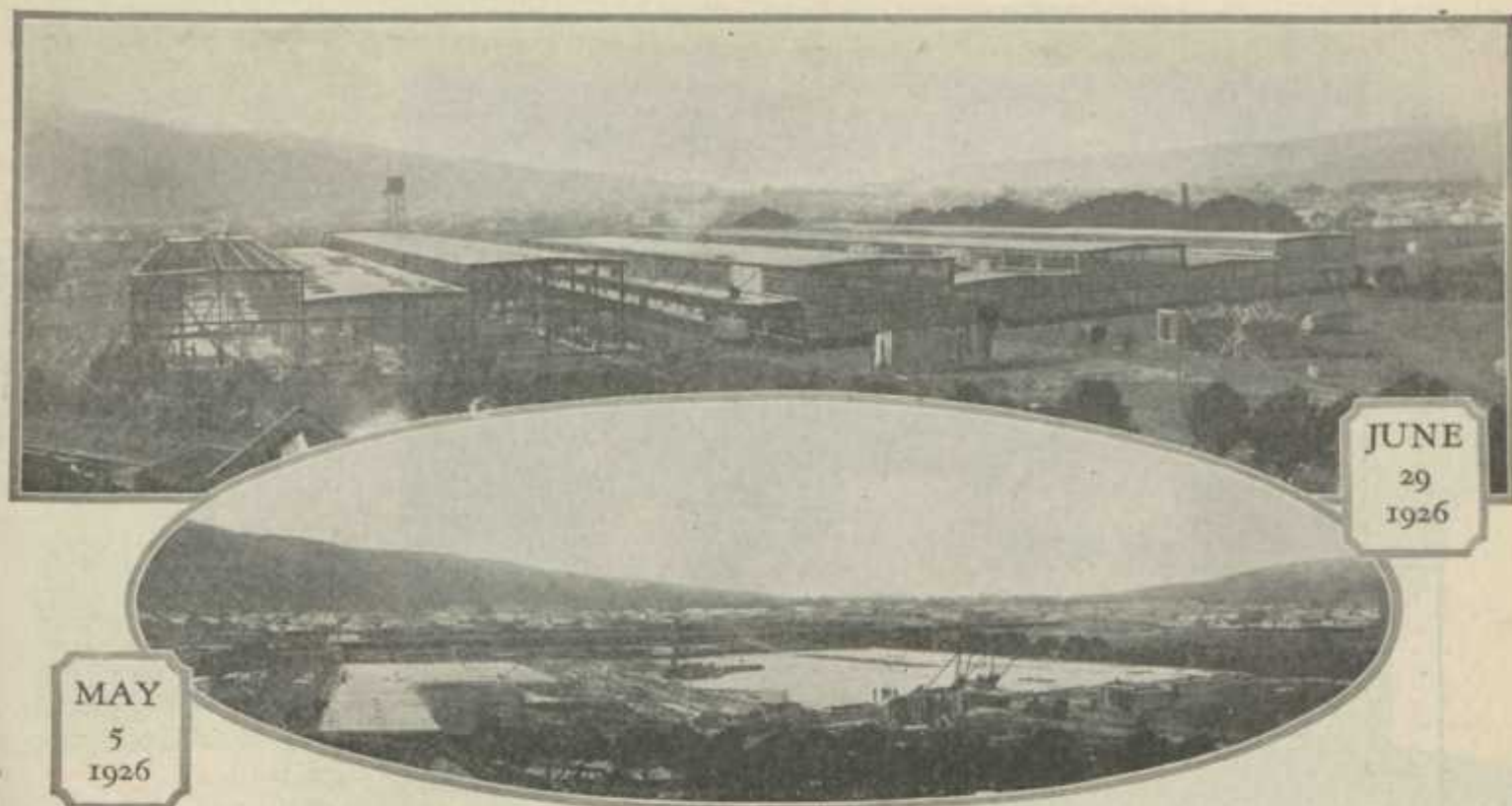
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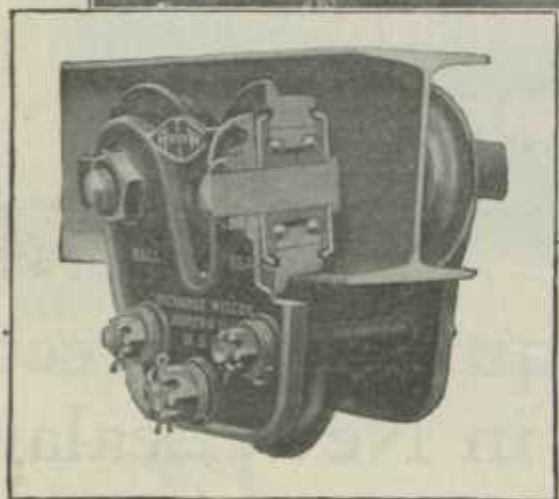
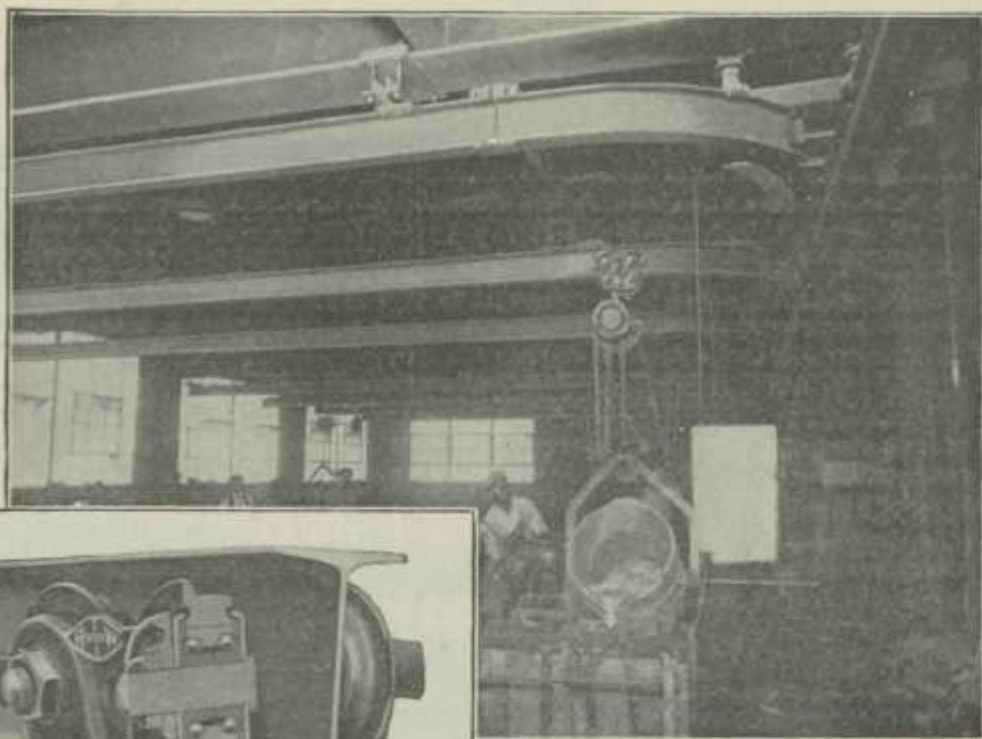
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**R-W No. 925 Ball-Bearing
I-Beam Trolley sent for**

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So confident are we of the ability of the R-W No. 925 Trolley to render superlative service that we will gladly send it to any reputable manufacturer for free trial. Such a trial involves no cost or obligation, for if the trolley fails to demonstrate its superiorities under actual working conditions you have only to send it back at our expense. This offer, we believe, is far stronger than any claims we can make. R-W No. 925 is made in seven capacities— $\frac{3}{4}$ to 4 tons. Ask for this FREE trial.

Cuts Labor Cost 2/3— One Man Replaced Three

**R. S. Conant, Gen'l Mgr., Nepperhan Foundry,
Henry Donahue, Owner, Yonkers, N. Y., says:**

"When we built our present foundry for casting sash weights, we installed a Richards-Wilcox OverR-Way system for handling our 2,500 lb. ladles from the cupola to the moulding floor.

"The cupola is located in the center of the foundry. Our main I-beam track line runs in front of it and extends in both directions. Switches lead to 8 tracks, 36 ft. long, located at 12 ft. intervals, for carrying the ladles to the 8 moulding lines for pouring. Four Richards-Wilcox No. 925 $1\frac{1}{2}$ -ton OverR-Way ball bearing trolleys carry $1\frac{1}{4}$ -ton chain blocks for handling the ladles.

"This arrangement is very economical, efficient, and flexible. The ball bearing trolleys permit moving the heavy ladle with a minimum of effort. The track can be extended in either direction to accommodate growth in the foundry.

"In casting the sash weights, approximately 800 lbs. of metal are poured in each flask. We pour 25 to 30 tons a day. The 2,500 lb. ladle can be handled by one man, which is unusual for this work. We formerly required 3 men to a ladle, so we are saving 2 men over our previous method.

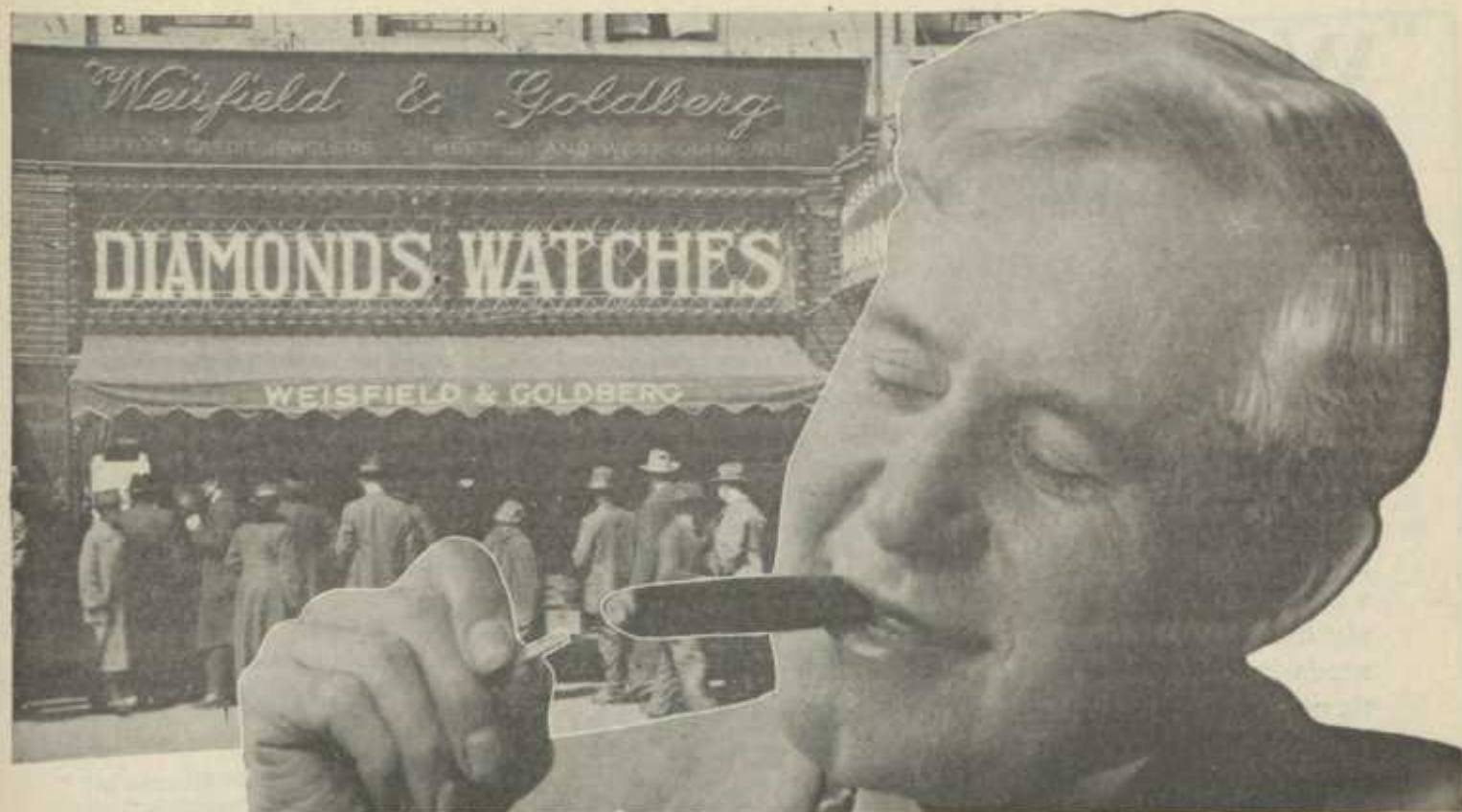
"The Richards-Wilcox I-beam track is very well adapted to this class of work, because it is easily accessible and cannot become clogged with dirt. The only maintenance required is to clean and oil the trolleys every few days. The system has worked out so well that we contemplate using it in our warehouse now under construction."

Richards-Wilcox Mfg. Co.

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(Manufacturer) "Of all our advertising efforts, Addressograph-ed Direct Mail brings most definite results."

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Mail Coupon Today—
No obligation—

MAIL
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☐ Send FREE Booklet:
"Which Is Yours, Direct
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Mail Selling?"

☐ Send Latest 3-Color Catalog and
Price List.

☐ Send Express Prepaid FREE Trial Hand
Machine. Will Return Freight COLLECT
unless we buy.

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"We are washing our hands of all of our oil troubles"

AN executive head of a great paper company wrote this in closing with us a contract to supply his plant lubrication needs for the next 12 months.

He faced the common problem of all paper makers: to keep production-flow moving uninterrupted; to keep down costs to a minimum.

"We are putting it up to you to supply the oil which is *needed in each case.*

"We will cooperate with you, endeavoring to keep records of our oil costs per ton of paper, and we will carry out your suggestions as *to applying the oil.*

"Then, if the oils do not work properly, we will know just *where to turn to find the reason.*"

The italics are ours.

We stress them because they epitomize the oil problem present in every plant.

FRICITION
—the unseen enemy
of production in
your plant



Keeping production moving at a proper cost implies smooth-running machinery which, in turn, calls for

1. The correct oil needed in each case;
2. The best means of applying the oil; and
3. Knowing where to turn to find the reason if results fail to meet the rigorous

production requirements of today.

Uninterrupted production at a faster gait is the immediate goal of industry; effective lubrication is an essential means to the end.

Industrial wastes are now so generally under executive scrutiny that the Vacuum Oil Company does not hesitate to assume the responsibility for the effective lubrication of any plant in which the recommendations of its engineers are carried out.

Send for us to call and discuss the matter.

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Headquarters: 61 BROADWAY, NEW YORK

Branches and distributing warehouses throughout the country



Lubricating Oils
for Plant Lubrication

When writing to Vacuum Oil Company please mention Nation's Business



FROM TIME to time, this Great Moral Monthly has descanted on the folly of Government operation of business. It has pointed out that all arguments as to efficiency are futile because no stockholder—that is, the taxpayer—can make head nor tail of the operation on account of government bookkeeping. The accounting is inadequate—often deceptive.

Consider the Post Office!

General Manager New states, apologetically, that his corporation this year will have a deficit of \$35,000,000.

Suppose, for sake of making the matter plain, the Bureau of Internal Revenue, which keeps an eagle eye on corporation income, should send an examiner to look into this Post Office Corporation, doing a business of a billion a year, and always showing a deficit.

The examiner might take his lead from personal experience. He has just written to shipping companies that he plans a trip abroad with his family next summer and has asked for information regarding sailings and accommodations. He is surprised to find the Shipping Board sends its selling material under a government frank while the privately operated shipping companies are using the well-known buff and green stamps.

On investigation, he would find that the Post Office Corporation not only is shouldering direct mail promotion expense of the Shipping Board but that its eleemosynary contributions extend to forty other agencies.

The Post Office Corporation carries, free, the mail of the National Screw Thread Commission, the Mixed Claims Commission of the United States and Germany. The Narcotic Control Board, the Panama Canal, the Rock Creek and Potomac Parkway Commission, the Federal Board for Vocational Education. For the Veterans' Bureau it did work to the extent of \$698,641 in 1925. In all, for various departments, commissions, and boards of the Government, the Post Office Corporation in 1925, donated services amounting in cash to \$14,385,441.

Following this lead, our examiner would find that his religious paper, his scientific journal, his fraternal publication, come to him under special rates. The Post Office Corporation donates approximately \$11,000,000 a year to this special class of customers.

It carries free, for example, all publications for the blind.

Our examiner would not question the policy of the United States Government in making these donations—a laudable policy, no doubt—but certainly he would raise the question as to whether the Post Office Corporation should be allowed to charge to its operation these expenses or whether they should be charged to a general expense budget of the United States.

Take rural free delivery!

No one questions the great value to the United States of this policy. Nothing, perhaps, has done more for the general wel-

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As the official magazine of the National Chamber, this publication carries authoritative notices and articles in regard to the activities of the Chamber; in all other respects the Chamber cannot be responsible for the contents thereof or for the opinions of writers to which expression is given.

No. 12



COME to the POWER SHOW

The Fifth National Exposition of Power and Mechanical Engineering is only about a month away.

On December Sixth, the doors of the Grand Central Palace in New York open on an

opportunity to cram into a single week the equivalent of two years devoted to visiting the world's greatest power plants, shops and mills. Equipment now going into the greatest power plant in the world, still newer equipment for producing more steam and power per dollar, tools which make operators worth still more to their employers, transmission equipment which further cuts the loss between driver and driven, materials and supplies which pare the maintenance account to the bone—these are but a few highspots of the exhibits.

See them all. See them at the National Exposition where you can examine them at your leisure and discuss them with those who are there solely to give you information.

Eighty-five thousand engineers and industrial executives from all over the world visited the Power Show last year. This year's Show will be bigger and better than last year's. The attendance promises to break all records. By all means come and enjoy this greatest opportunity of the year to observe what designing and manufacturing skill have wrought for your service. You will find your visit enjoyable and profitable.



Fifth National Exposition of Power and Mechanical Engineering

Grand Central Palace, New York, December 6 to 11, 1926

fare of the country. It should not be curtailed but extended.

Our examiner from the Bureau of Internal Revenue, however, might question the distribution of this expense. The appropriation for the current fiscal year was over \$105,000,000. The Post Office estimates the revenue received on all of the mail, either originating or delivered on rural routes, to be \$15,000,000. Here is a deficit of \$90,000,000, not chargeable to operation but to promotion of the general welfare of the United States.

The Government should pay it, but why the Post Office Department?

Why not the Department of Agriculture, or the Commerce Department?

The total of these expenses created by Congress through a desire to help the general welfare of the United States is in the neighborhood of \$130,000,000. General Manager New might very well feel that his annual apology of a deficit is not due to his lack of efficiency but to lack of proper accounting methods.

We respectfully suggest that he take the matter up with General Lord and see if there cannot be set up an accounting system which would more accurately reflect the actual operations of the Post Office Department.

PROPER accounting in the Post Office Department means much to the individual American citizen. As it is, he is paying an indirect, or hidden, tax to the support of a wide range of activities. It is an unfair tax, because the better customer he becomes of the government mail monopoly the more he pays than his neighbor pays.

Furthermore, it gives him a false picture of what is going on. He might be able to express an opinion on certain expenditures if they were out in the open, but, hidden as they are, he is helpless.

The temptation is great on the part of Congress to sweep this and that expense on to the Post Office budget, and the situation is highly significant when we remember that President Coolidge has stated that the Post Office Department must pay its way.

So it goes!

In every federal, state, or municipal operated industry, there is faulty bookkeeping. In the case of the Post Office Department, it suits the politicians best to show a deficit, so a deficit is shown. In the case of a municipal operated railway, for example, it suits the politicians to show a profit, so, applying reverse English to the bookkeeping methods just described, a profit is shown.

Even if the amount of wilful juggling of figures is small, it lies in the very nature of the case that, when government, either city or state, with its wide latitude of welfare activities, is doing the job, a businesslike picture of business operations scarcely can be hoped for.

FOR A LONG time exponents of government ownership have used New Zealand as a shining example.

But disquieting news comes from the far reaches of the Pacific.

New Zealanders are developing a Missouri complex. They demand to be shown.

It seems that all money spent to operate the New Zealand railroads comes from the general government treasury and all revenues from operation are turned into the general treasury the same as other revenues. There's no accounting of operating expenses against revenues, at all.

Railway Review describes the convenient

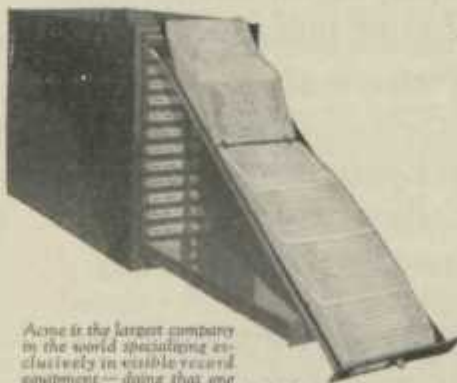


"Don't tell me, man, show me!"

The manager could have shown him, too. But not *instantly*!

For his stock records were filed away, slow to yield their data. When facts were wanted, time, and lots of it, was needed to dig them out.

Acme Visible Equipment would have made all stock and inventory facts easily available on records that instantly tell their story. Summarized facts, concisely presented so as to visualize conditions at a glance. No lists necessary; no figures to draw off; all data visibly presented by bright



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signals flashing a positive message.

One of these days you will feel, more acutely than usual, the need for stock records, personnel records, sales records, that are out in the open, visible!

Of course, if you're really forehanded, you won't wait for such a day.

You'll send *now* for the Acme man to go over your record needs with you.

When you fill in the coupon, check whether you want the man or our new and very interesting book "Profitable Business Control." There's no obligation in having either.

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Send for our booklet, *Schedule of Fees for Corporate Trust Service* or, without incurring any obligation, consult the nearest representative of The Equitable with regard to any of the services rendered by our Corporate Trust Department.



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Total resources more than \$450,000,000

system of bookkeeping that is employed:

The financial statistics of the railways appear only in the general government report, mingled inextricably with postoffice receipts, the telegraph system, the bureau for furnishing free seeds, and the bureau for bigger and better kangaroos.

Now New Zealanders are demanding to know what's what and why. A new system of accounting is called for—a system that will put each tub on its own bottom.

If the advocates of government ownership in this country exploit this piece of news as diligently as they have exploited the golden days of New Zealand's socialism, we may get a better accounting of governmental operation in this country.

THE GREAT American stomach is in for a wonderful time. The United States Fisheries' Association has decided to spend \$300,000 to teach us to eat more fish; the same week the bread industry set aside \$400,000 to expound the virtues of white bread. The Department of Agriculture announces a publicity campaign to increase the use of domestic rabbit-meat. The same day it announced its intention to cooperate with growers and dealers in a nation-wide campaign to increase apple consumption.

Sauer kraut and green olives and ice cream and whalemeat; bananas and oranges; raisins and canned salmon; oysters; medicinal cookies—all are fighting for a place in the nation's stomach.

It's a merry battle of industries and may the best one win and nobody get indigestion!

CHARLES EDWIN LOCKE, Attorney, Los Angeles, writes:

You make me mad! I ordered your paper stopped in July. My last copy was August. Then here you send me the September number and it is so danged good I just gotta resubscribe. So put me on for another three years, and the Lord have mercy on your soul!

May the Lord send us many more such "mad" subscribers.

THE NEWSPAPERS report that Senator Tyson of Tennessee, for whom we have the highest regard, stated, in an address at Chattanooga, that "we have talked for fifty years and have done but little for the farmer."

It may be the senator is right; that the Government has done but little for the farmer. If he means that the Government, through recommendations from Congress, has not tried to do something for the farmer—ah, that's another story!

Just to keep the record straight, here are a few things which occur to us in this connection:

Federal expenses last year, for everything, exclusive of national defense (and expenses incident thereto), public debt payments, refunds of taxes, and the postal service, amounted to \$523,000,000. Of this was expended for the farmer, \$165,000,000, or thirty cents out of every dollar the Government spent for ordinary activities.

Twenty thousand federal payroll places are filled by employes administering farm aid through not less than 3,000 activities.

The Government employs a specialist in every rural county to show the farmer how to make the most out of his business.

It maintains 7,300 miles of leased wire to furnish him daily and hourly price quotations on everything he produces.

It throws open the range to his cattle at a cost of 12 cents a month per cow for pasture, and 3 cents a month for each sheep.

It conducts a radio service to bring him the latest market news every evening.

It lends him money on his land, his livestock, and his crops, and has advanced money, when necessary, to buy seed for planting.

It operates, with the states, a far-flung and extensive chain of experiment stations staffed by eminent scientists, for the purpose of finding new ways by which he can earn additional money.

It predicts, in advance, prices of his crops.

It suspends the operation of the anti-trust laws so that he may combine with his neighbors to sell what he produces at the highest possible prices.

It spends millions annually in fighting plant and animal diseases and pests.

It sends its representative into his home to teach his wife how to put up preserves, make clothes, trim hats, ventilate the living-room, paint the furniture, screen the doors and windows, make the chickens lay oftener, put the kitchen sink at its proper height, balance the farmer's diet, plan the flower-garden, and change the linen on the sick-bed.

It may be, as the senator states, that little is being done for the farmer. Perhaps the answer is that the Government cannot do these things for the farmer as well as he could do them for himself, and that thought goes to the business man and the professional man and every John Henry Citizen of us who is more and more willing, it seems, nowadays, to "Let Washington Do It!"

WE THINK of Oscar Wilde in many rôles—poet, exquisite, wit, harum-scarum genius, but hardly as the prophet of the mechanical revolution in industry. Yet listen to these words of his I ran across the other day:

The fact is that civilization requires slaves. The Greeks were quite right there. Unless there are slaves to do the ugly, horrible, uninteresting work, culture and contemplation become almost impossible. Human slavery is wrong, insecure, and demoralizing. On mechanical slavery, on the slavery of the machine, the future of the world depends.

THE CHIEF clerk came in late. Second time in a week.

The Boss grouched: "Don't you ever do anything on time?"

"Y-es, sir," stammered the c. c., "I bought my radio set that way."

WE'VE all heard much, read much about the distributor. Both pro and con—lots of con, but now and then there's a real contribution.

This from A. L. Salt, President Graybar Electric, admirably classifies under the latter category:

In this country we make a fetish of service. We insist on getting the things we want when we want them and where we want them. This demand for service keeps step with our civilization—as our civilization grows and improves our demand for more and better service increases. Service may be the cause or effect of improved standards of living. And as these demands for better service and more of it increase, the need of better, more scientific and specialized distribution becomes more apparent. In the old days, when everybody kept a cow in the back yard, milk cost little per quart. Today we insist on having our milk delivered each morning to our doorstep in sterilized glass bottles, the milk itself properly pasteurized and its freshness assured. We pay for this service—a service of distribution—and pay gladly, for no one today wants to keep a cow in the parlor.

WASN'T it Aaron Burr who said the law is whatever is stoutly asserted and plausibly maintained?

At any rate, all our lives we've heard it



Here's an island Paradise for your next convention

HAWAII invites the Western Division of the Chamber of Commerce of the United States to hold its 1927 mid-year meeting in Honolulu. A delegation from all of Hawaii's Chambers of Commerce will greet you at the Colorado Springs convention, December 6-7, with ALOHA and a hearty invitation from the 330,000 residents of America's mid-Pacific territory.

Ideal convention facilities

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boldly asserted and stoutly maintained that a silk purse couldn't be made of a sow's ear.

But I'm told an enterprising synthesizer working in his laboratory at Wilmington has done just that—made a silk purse, rayon silk—out of a pig's ears.

SPEAKING of science and synthesis, calls to mind the case of Michael Faraday, the Englishman who in 1831 rotated a copper core between the ends of a magnet to prove that this simple operation induced an electric current that flowed through a wire attached to the core.

With this as a basis, Faraday later invented the dynamo. The invention and perfection of the dynamo was the link between the scientific discovery and its practical utilization.

It is related that when Faraday showed the invention to an English peer who visited his laboratory, the noble lord was mildly interested. He said, "Most interesting. But what's the use of it?" To which Faraday replied, "Well, perhaps some day you can tax it."

This may have been a bit of pleasant repartee on the part of the inventor, but it was truly prophetic, for in this country today the electrical industry—made possible by Faraday's invention—is the third largest corporate taxpayer.

Who shall say that developments such as those forecast in Williams Haynes article in this issue of NATION'S BUSINESS may not, during the next few years, prove as revolutionary as Faraday's invention?

IT IS interesting to recall, too, that some of the greatest benefits accruing to industry have often resulted from the most "impractical" investigations.

Reaumur spent a lifetime observing the habits of wasps. Just imagine a grown man spending his time watching "mud-daubers."

Yet from the wasps Reaumur learned the secret of pulp-making. By close observation he discovered that wasps made their nests from a sort of pulp obtained by chewing up bits of wood and other vegetable matter. Applied scientists, following up this interesting discovery, produced the first paper from wood pulp.

Think what that means, today, in terms of the publishing industry—newspapers, magazines, books!

As Dr. Slosson said a few months ago in NATION'S BUSINESS, "pure science pays its way."

THEY had been discussing ethics in the high school. Youthful Morris didn't quite get it all. He came home and asked:

"Papa, what is a ethic?"

For the moment father, too, was stumped, but eventually he worked out his answer:

"Suppose, Morris, you sell a suit for \$75 what is a regular \$50 seller, the ethic is, should you tell your partner about the \$25."

NOT LONG ago a friend of mine was motoring across country with another friend. They came to a crossroads village. The paved highway and the gas pump were the only tokens of modernity to be seen anywhere. All else was of the vintage of 1870 at least. A single store, a frame building, one story, with a square false front, was embellished in fading paint: "Dry Goods and Notions."

My friend's friend took in the situation at a glance. The sign caught his eye and he said:

"Dry goods, perhaps, but d— few notions, I'll bet."

M.T.



A Flood of New Light

IN the NEW 13TH EDITION of the ENCYCLOPAEDIA BRITANNICA, just off the press, a flood of new light is thrown upon the tremendous developments of the last sixteen years—those transforming years which have brought about a complete and startling revolution in human life.

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ing of horses' feet has been replaced by the purr of motors. Foundry fires burn day and night. Rivetting machines chatter.

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H. Brearly describes a new process for making rustless steel.

Ethan Viall tells all about Thermite, a new compound which, only last winter, saved the inhabitants of a Pennsylvania town from the menace of an ice barrage, by melting the ice with a heat of 4,500 degrees Fahrenheit.

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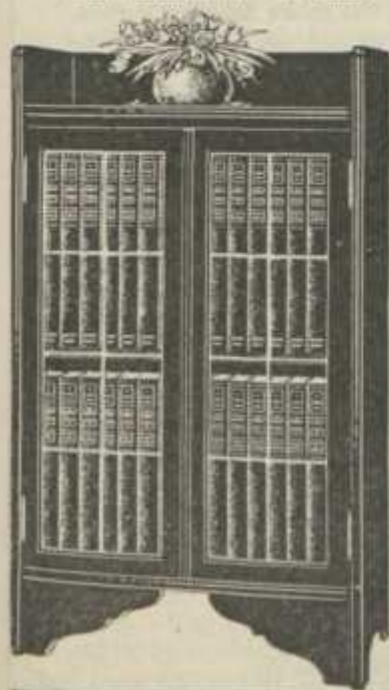
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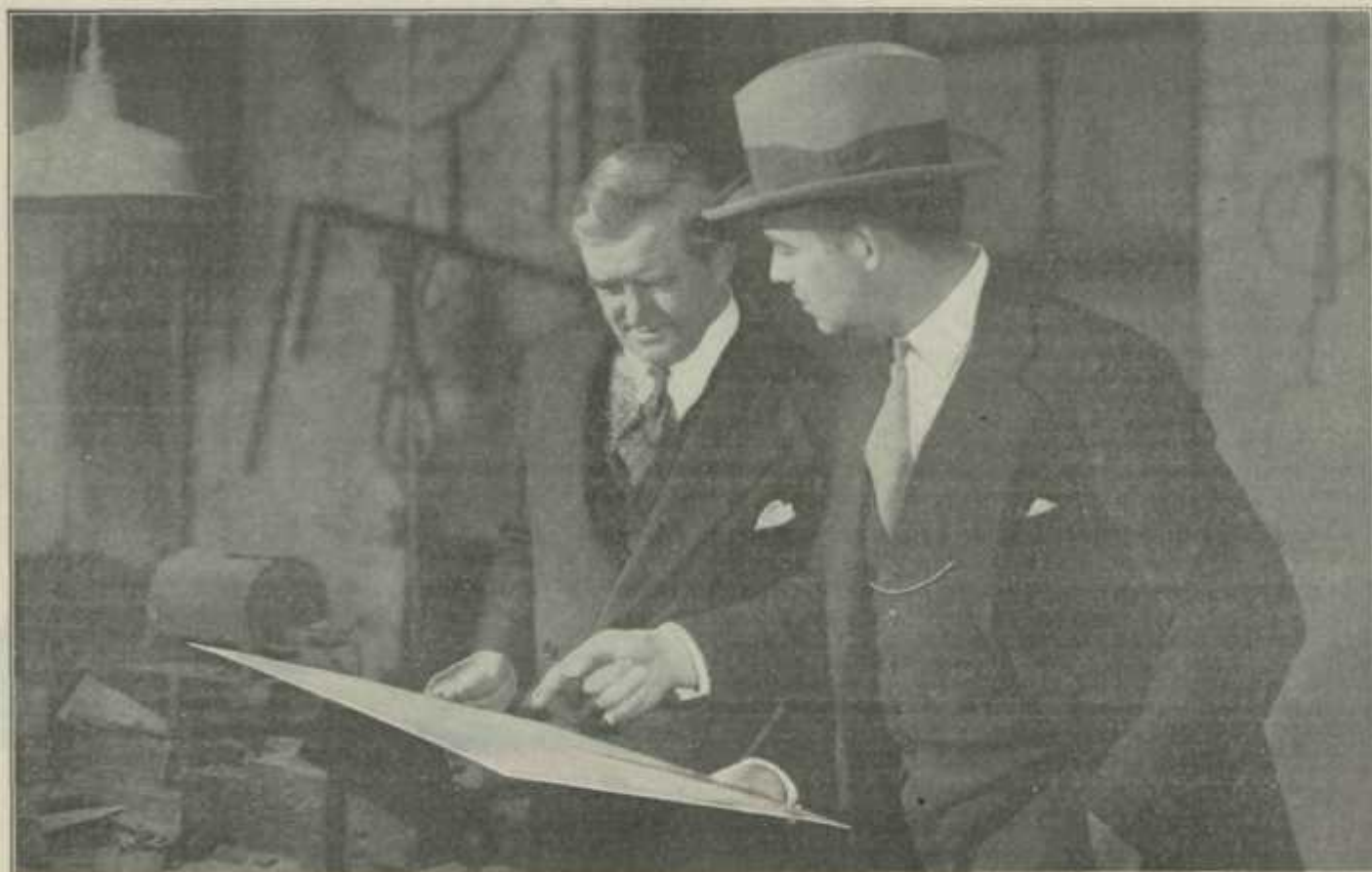
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Mr. Speaker LONGWORTH *says*



The Speakership, an exalted station, is reminiscent of Clay and Polk; of Tom Reed, Carlisle and Champ Clark. From the eminence of the speaker's rostrum, Mr. Longworth says: "The House of Representatives is absolutely free and independent. No one man is Boss."

Character Drawings by A. Edwin Kromer

Our Congress Is Businesslike

THE BUSINESS of the House of Representatives is the business of the country. The United States of America is the richest and most important country in the world, and the House of Representatives, therefore, is the biggest business institution in the world.

Theoretically, of course, the two branches of Congress have co-extensive and equal powers. Practically, though, the House has more to do with the internal affairs of the country, and the Senate with its external affairs.

Under the Constitution, the sole power to originate bills raising revenue is vested in the House, and the power to pass on treaties with foreign governments lies in the Senate. All general bills, too, for appropriating money for governmental purposes, originate in the House. The House, therefore, has the basic and fundamental control of the purse strings of the nation.

There have been times in the past when the Senate, through its power of amendment, has greatly altered many bills sent over from the House. There have been tariff and revenue bills in years past which, in their final form, were very largely the work of the Senate. There have been appropriation bills which, as finally enacted, usually in the direction of increase of expenditure, were largely the work of the Senate.

The Senate in those days was the stronger and more forceful body. The balance of power between the two legislative branches, as contemplated by the framers of the Constitution, had been destroyed. The Senate, instead of being the equal, had become the dominant body. Those days have passed; the just balance has been restored. A study of the revenue

bills enacted into law in the past few years will disclose that in all essential respects their provisions, as enacted by the House, have remained unchanged. In like manner, since the adoption of the Budget System and the centralization of appropriating power formerly enjoyed by a number of House Committees in one committee, the great House Committee on Appropriations, the bills as originally passed by the House, and finally enacted into law, have been, for all practical purposes, identical.

Today the House of Representatives stands firmly entrenched in its control over the nation's purse strings, and with that control goes the responsibility for the direction of the very life-blood that must course through the arteries of the commerce and industry of the nation.

What manner of men are these to whom are committed such vast powers and responsibilities? And how do they function as a body?

To get the picture, it is desirable to note, first, the vital difference between our form of government and that of every other country which maintains a national parliamentary system.

America is unique in the absolute divorcement between the executive and legislative branches of the government; elsewhere there is no such separation.

There the two branches function together.

There real power and responsibility are lodged in a ministry, or cabinet, which functions directly on the floor of the most popular branch of their parliament and determines their legislative program so long, at least, as it can secure from a majority of that body a vote of confidence. There, even in the

legislative chamber itself, the executive is everything, and the individual member, not also a member of the government, is practically nothing. In some parliaments he is not allowed even to introduce a bill relating to national affairs.

In America the House of Representatives, our most popular branch, stands by itself. There is no power in the executive to directly control or influence legislation there. The Cabinet takes no part in its proceedings. The President himself cannot address the House except by its invitation. The sole power of the executive in legislation is that the President may veto a bill, which becomes a law notwithstanding if it shall obtain a two-thirds vote in both the House and the Senate.

In the House every member stands on the basis of exact equality. The privileges and prerogatives of the newest member, with respect to voting, taking part in debate, and the introduction of bills, are on an exact par with the oldest. The fact that, during the session of Congress recently adjourned, more than twelve thousand bills, dealing with almost every conceivable subject of national interest, were introduced, would seem to indicate that the average member was not unmindful of his privilege of at least suggesting what he regarded as beneficial legislation.

How Does the House Act?

TO RETURN to the question, How does this body function?—this body, endowed with enormous powers and responsibilities, and independent of dictation from any other branch of government.

It is well to have in mind two other respects in which our problems of government differ from those of any other great nation. In the first place, the peoples of most other nations are practically homogeneous, with respect to race, language and religion; secondly, their internal, geographical and climatic conditions are such that the commercial and industrial interests of all sections of the country are substantially identical.

America is a comparatively young country, and its body politic is an amalgamation of most of the races and nationalities of the

world; and while we all stand today united under the Constitution, it is inevitable that some habits of thought and action, prejudices race-old in their nature, should still linger among certain classes of the people and in certain sections of the country. It is inevitable, too, that these habits and prejudices should be reflected by their chosen representatives in Congress.

Opposing Interests at Work

EVEN more important, as contributing to the difficulties in the solution of our economic problem of legislation, is the fact that the commercial and industrial interests of many sections of the country are not only unidentical but absolutely adverse and antagonistic one to the other. Climatically, we include almost every zone between the Arctic and the tropic. Outside of coffee, tea, rubber, wool and sugar, we produce practically every raw material of fundamental necessity in a quantity equal to the demand of the American market, and in some cases in excess of that demand.

Moreover, we are the greatest manufacturing nation on earth. These conditions but add to the complexity of our problems.

It is only human nature that the people of the section producing the raw material should want to sell for the highest possible price to their consuming market, and to buy the finished products of that market for their consumption at the lowest possible price.

Conversely, it is but natural that the people of the section who produce the finished product should want to sell it for the highest possible price to their consuming market, and to buy in that market their raw product for the lowest possible price. From this point of view, it would be hard to imagine any two states of the union whose interests are not antagonistic to a greater or less extent, and the same thing is true, in some degree at least, of most of the Congressional Districts in the various states.

In these circumstances, and after an experience of a good many years of practical framing of tariff and revenue bills, and in

legislation designed to benefit some particular industry, agricultural or otherwise, I sometimes permit myself to wonder, not that this legislation should be unpopular in some quarters, but that Congress is able to pass any legislation of this character at all which can stand the test of time.

The House of Representatives, whose peculiar province it is to deal with the problems above mentioned, together with all other problems inherent in congressional action, is elected in its entirety every two years. It consists of 435 members, representing in the aggregate every square foot of territory in the United States.

Government for the People

THE first duty of each member, of course, is to the nation; the next is to his constituents, for, fortunately in America, every member of the House of Representatives, except in very rare instances, assumes to represent his whole constituency and not only a particular class of its people. As a rule, somewhere between 15 and 20 per cent are new members, without any congressional experience, and sometimes in the case of a big political turn-over the proportion is considerably larger.

How is it possible that so large a body, heterogeneous in its nature, entirely independent of outside dictation, beholden only to its constituents, is able to transact the business of the American people with efficiency and dispatch?

The requisites are three, at least: cooperation, involving a willingness on the part of individual members to give and take for the common good; strong leadership, involving the sense of party responsibility; and adherence to a system of rules which permit a majority to function at all times when necessary.

It has been the fashion at times to criticize the rules of the House. It is sometimes asserted that they are complicated and drastic on the individual, and lead to absorption of power in the hands of a few. These criticisms are without foundation. The rules of the House are the outgrowth of years of experience, and of the combined work of the best minds of all parties. On the surface they are complicated, for they must provide for all possible contingencies. They are sometimes difficult of application to a given



"What manner of men are these? They are the best available. They are fairly representative of the people who send them," says Speaker Longworth of the 435 members of the House. Among them, for example, is a rancher from Texas, a furniture man from Indiana, a corn farmer from Iowa, and a literal "butter-and-egg" man, a wholesale produce dealer, from New York State.

state of facts, but fundamentally they are simple, for their design is to permit the business of the nation to be transacted in spite of factious opposition and obstruction.

The bed-rock difference between the rules of the House and the rules of the Senate is that in the House a member must confine himself in debate to the question before that body, except under certain conditions; in the Senate, a member may speak on any subject, no matter what is before that body, except under certain conditions. Consequently a filibuster on the part of an individual or a small minority, which frequently wrecks good legislation in the Senate, is seldom resorted to in the House, and, when undertaken, is usually ineffective. Yet, while it lies in the power of the majority of the House, always, to close debate, unless a unanimous consent agreement for its continuance has been reached, it is rare indeed that complaint is made that the utmost latitude is not always allowed for debate which is enlightening, and in the direction of giving and seeking information, and not for the purpose of obstruction, pure and simple.

Where Real Majority Rules

UNDER the rules of the House, a majority of the membership, within reasonable limits as to time, can always transact business. It may overrule the decision of the Speaker; it may even take him from his chair. It may take from a committee and bring up for consideration any measure which that committee has failed to report. In short, a majority in the House, whether political or numerical, and not one man or set of men, is the boss of the House.

For the completion of a definite, progressive and constructive legislative program, however, something more than mere adherence to rules is necessary, and that is leadership; that means party leadership.

To put through a program which has been submitted to and endorsed by a majority of the American people, it is necessary that it should be under the auspices of a party united on the fundamentals of national policies and sufficiently strong to have a clear majority in the House, and that party must assume responsibility and be willing to abide the consequences. If it shall succeed, it deserves and will receive the confidence of the people. If it fails, its power can be de-

stroyed every two years. That is the system that has prevailed almost continuously since the Civil War, and the system under which all constructive legislative programs have been put through.

It is the system of party responsibility. Any other system makes for inefficiency and irresponsibility. The European system of bloc or group government in the House of Representatives would result immediately in inefficiency and lead eventually to chaos.

What manner of men are they who compose this great body?

How does the present House of Representatives, in aggregate ability, character and patriotism, compare with congresses in the past?

As a result of more than twenty years of service in the House, and of some research in the history of parliamentary bodies here and elsewhere in the past, I have no hesitation in asserting that, taken by and large, the membership of the House of Representatives of the United States Congress averages at least as high as that of any legislative body at any time in any country of the world.

One frequently hears complaint that the standard of Congress, and for that matter of all of our public men, has lowered in recent years. History records that the same thing was said of the congresses of which Clay was a member, of which Lincoln was a member, of which Blaine, Reed, Carlisle and Randall were members.

It might be a fruitful topic for debate, but the result would be unconvincing, because it is not susceptible of proof. It would seem to follow that, if the statesmanship of the country is degenerating, the quality of the citizenship of the country must be degenerating also, because it is beyond argu-

ment that every member of Congress, certainly any one who remains there for any length of time, is fairly representative of the people who sent him there. That the precise contrary is true, I firmly believe. Hence, it would seem highly improbable that, as the citizen improves, his representative in Washington should deteriorate.

Whether it be true or not that our public men of today, the men upon whose shoulders rests in great degree the security and prosper-

ity of the country, are inferior in ability and statesmanship to the heroes of the past, this much at least is true, that they are the best available, and it is greatly to be doubted whether there exist men in private life who could fill their places with any real advantage to the people of the nation.

Unlike any other similar parliamentary body, as has been pointed out, the House of Representatives of the United States is absolutely free and independent. So being, it is justly jealous of its prerogatives. It welcomes, of course, advice from business men, from men interested in the upbuilding of industry and in the acceleration of the march of progress; in the commerce of the nation; it welcomes, of course, the advice and cooperation of men engaged in agriculture and proficient in its science, and of men and women interested in the welfare of the workers in all forms of industry.

It welcomes, of course, the advice and cooperation of the President of the United States, and of his cabinet, and of department heads and experts of the various branches of government, but it intends to preserve the independence guaranteed it under the Constitution and to remain the most truly representative legislative body on earth.



"The entire membership of the House is elected each two years. As a rule each Congress has from 15 to 20 per cent new members, without congressional experience, and sometimes in case of a big political turnover the proportion is larger."

Who's to Blame If It Won't Clean?

By WARREN BISHOP

"LOOK!" said the Outraged Housewife to the Calmly Superior Person whom she had married.

"Just look! I have had that dress but five weeks, and I don't believe that I have worn it more than four times. But you know how hot it was at the dance at Oakdale the other night, and so I sent it to the cleaner's. And now just look!"

The Calmly Superior Person did look. He saw what once had been a silk dress, but even to his unskilled eye there was now something wrong about it.

"Well," he said, "why don't you try dealing at good places instead of hunting bargains in cheap shops?"

"I did," was the Outraged Housewife's answer. "I bought it at Camp & Field's, and I am going back there and give them something to think about. It was a bar-

gain, but not such a bargain after all. I paid \$57.50, and it ought to be good material, it seems to me. I certainly shall give that store a piece of my mind. I suppose my monthly bills with them must run over five hundred dollars a year."

"But," said the Superior Person, "did you ask them if it would clean?"

"Of course not. Why should I? They ought to have told me if it wouldn't clean. When I pay that much for a dress, I expect it to be good."

"Who did the cleaning job? The first place you happened to come to?"

"No, I took it to Schmidt's, where I have always gone, and I don't remember that I ever had any trouble with them before."

"I don't suppose it occurred to you to ask him if it would clean all right."

"Why, of course not. It is his business

to know whether a thing will clean or not and to say so if it won't."

"And what is more, if you are going to start off telling me how much better you run your business than I run mine, I don't want to hear it. I am sick and tired of it. Right now you are just on the edge of telling me that you have had one secretary for five years and never had any trouble with her, and that I have had three maids in the last year and a half."

"And all I have got to say about that, Walter, is that if I could treat my maid the way you treat Miss Wilson, it would be a lot easier to run this house. She knows she is expected to get there at nine o'clock, and she leaves at five, with an hour for lunch at a set time. But you are just as apt as not to make up your mind the night before that you want a six-o'clock break-

fast in the morning, in order to play golf, and expect me to have Nettie come here at any hour that suits you. I could go down and run your old office if I had things as simple to handle as you have."

By this time the Calmly Superior Person was reduced to the point where all he could say was:

"But my dear——"

"Don't 'but my dear' me. And while I am thinking about cleaning and you are telling me how I ought to have done it, what about that silk shirt you had two weeks ago? You remember the one that came back from the laundry so you couldn't wear it? And do you remember telling me that you would give that laundry something to think about? They'd either pay you back or give you a new shirt? I hope you remember that. And you went to the telephone and called up the laundry, and what happened? In about five minutes all you could say was 'Yes, sir,' and 'No, sir.'"

A conversation which goes on in some hundreds of American homes every day in the year, more fiery at times, more polished at others, but always leading up to the unanswered question: Who's to blame when your best shirt comes back from the laundry a wreck and the cleaner returns a silk dress an inch or two longer in front than in the back?

I have said that the question was unanswered; I haven't said that it was unanswerable. The answer can be found, but it is not as easy to find as the casual bystander might think.

Who Really Makes the Shirt?

HOW many factors, how many industries, enter into that silk shirt or that dress?

The silkworm was perhaps raised in China, the thread spun in Japan, the cloth woven in Paterson, New Jersey, or in France, the dyes made in Germany or in this country. And so it goes. Dyers and weavers and manufacturers of thread and buttons, and makers of shirts and dresses, and retailers—dozens of industries enter into the completion of the garment, and any one or several of them might be responsible for the fact that the garment would not clean or wash.

If the situation in silk fails to show how difficult is the task of fixing responsibility, how much easier it is to draw up a code of ethics than to put that code to work, let me ask your attention to what might have happened (but never did) in the thriving community of Homeburg in the summer of 1926.

Homeburg is what its proud inhabitants call "a mighty good little town." It has all the virtues, including a golf club. It boasts of one dealer in men's wear whom all the "best people" patronize. Like many another American community, the "best people" are those who live on "this side" of the railroad tracks. The rest of the inhabitants—not quite "the best"—live, of course, on "the other side."

Early in 1926, knowing that the country club was thriving and that the Wednesday and Saturday night dances called for white

trousers, the dealer who catered to the "best" laid in six dozen pairs of white flannel trousers and in due time sold them to six dozen—or 72—male leaders in Homeburg society.

What happened next? The six dozen—particular, as the best people always are of their appearance—deposited the six dozen flannel trousers with the town's one recognized cleaner to be made beautiful and spotless again.

Now the plot thickens! Seventy-two

WE TALK GLIBLY of the duty of business to govern itself and we are likely to assume that the task is simple—that all that is lacking is the intention to be honest. Here is a case of business trying to govern itself yet the dependence of one industry on another makes the problem much harder than it seems. Here is an instance from everyday life.

Not a family in the country but now and then complains of the cleaner. Yet how many people realize that the responsibility may be not with the cleaner but with the manufacturer or the retailer, and may even go back to the sheep, the silk worm or the cotton plant?

What is the duty of the cleaner? What is the duty of the retailer? What is the duty of the textile manufacturer?

These are the questions the cleaners and textile makers and sellers are honestly trying to answer.—*The Editor.*

pairs of white trousers returned to seventy-two owners in such a state that not a pair of them could be worn. Fresh white they were and neatly pressed, but could the cashier of the Homeburg National appear in public in trousers that halted midway between knees and ankle and in which obviously he could not sit down?

So seventy-two irate leaders of the social, civil and business life appeared at the country club in trousers other than white and descended the next day upon the town's chief cleaner.

They asked him if he cared to make a few final remarks before the rope was looped around his neck and the other end fastened to the limb of a tree.

Then he spoke, as the newspapers used to say, "substantially as follows":

"Why, O fellow citizens, lynch me? I gave your white trousers the best possible treatment and followed the best practices of the industry. If they shrunk, I'm not to be blamed. Go rather and lynch the man from whom you bought them."

The End of a Great Reform

SO THE maddened seventy-two moved on to the dealer who had sold them the trousers. Of him they asked in turn if he had anything to say before summary justice was done. His reply was like the cleaner's.

"Why lynch me? I ordered them in good faith. I didn't know the trousers would shrink. Go rather to the clothing manufacturer and ask him."

So they put off the lynching again, and because the manufacturer lived a long way off they wrote to him and he referred them over to the man who wove the wool; and in the end, if they had gone far enough, the accusing finger might have been pointed at the sheep which furnished wool of too short a staple to be used in the manufacture of white flannel trousers. But they never got that far. Instead they chose a committee which adopted a resolution with six "whereas'es" and four "resolved's" and went

right on wearing white flannel trousers. Which is about as far as many great reform movements ever get.

A fable ought to have a moral and this fable of the White Trousers of Homeburg is no exception. Its moral is:

"Being honest isn't as simple as it sounds."

Is it the cleaner's duty to guarantee to his customers that goods can and will be cleaned? The industry now pays one per cent of its income in claims for damage, many of the claims, they feel, being unjust.

Must the retailer make it his business to know of each fabric in his shop whether it will or will not clean or wash? And is it his duty to tell the buyer that it will or won't? Or is he justified if he answers the buyer's questions honestly and sells the goods "as is."

What of the manufacturer's duty to the retailer? Of the manufacturer of dyes to the manufacturer of silks?

A hundred questions arise. The average consumer knows but two factors, the man who sold her the goods and

the man who cleans or washes them, yet back of these two stretches the long line that ends in a sheep ranch in Australia or a cotton field in Georgia, a mulberry tree in China, or a chemical factory in Germany.

Ethics of Sale Growing

YET THE awakening business conscience of this country is facing the problem, is making the first efforts to tackle and find the answer that above all shall keep in mind the rights of the consumers.

The movement started last spring when the dry cleaning industry found itself forced to deal with new fabrics which would not readily clean. One was a mixture of silk with a large percentage of rubber. Dry cleaners, as most of us know, dip fabrics in gasoline and gasoline dissolves rubber. The result can be imagined.

One questions the right of our wives to buy dresses made of silk that is part rubber. But, should the retailer warn them that the material will not clean? Is he himself always duly warned, and if not what is the manufacturer's duty to the retailer?

Rubber is a bane of the dry cleaner's life. He finds evening dresses trimmed with feathers in which the feathers are held in shape by rubberized adhesive tape, and when he dips the dress in naphtha it is simply de-trimmed. The use of viscose, the mixing of cotton and worsted and consequent uneven shrinking are all complications.

Rayon looms large in our modern textile world. How clean or wash it? What are the proper standards for its manufacture for clothing or for household use?

Silk is "weighted" with tin. Such silk will, under certain use, clean. Sometimes silk is weighted with lead and the cleaners say that not only will lead-weighted silk not clean but that it will damage other garments with which it comes in contact.

It was at the request of the dry cleaners that a proposal for a preliminary conference was made. The United States Chamber of Commerce furnished a chairman and helped

as a central watcher whose interest is keen in any effort by business to govern itself, to set up better standards of business conduct.

A first meeting was held in New York in September. A partial list of the associations represented gives a vivid idea of the ramifications of this question:

Suit and Cloak Makers.

Furriers.

Woolen and Worsted Manufacturers.

Dress Industries.

Silk Dyers.

Retail Clothiers.

Upholstery Manufacturers.

Woolens and Trimmings.

Laundry Owners.

Dyers and Cleaners.

Silk.

Retail Dry Goods.

That first meeting didn't go far. No one thought it would. Yet it was a milestone

in the progress of American industry towards the goal of self-government, an ideal to which the Chamber of Commerce of the United States of America is committed and it is so easy—and so full of future difficulties—to turn the job over to the governments, federal and state. Let's pass a law decreeing that all manufactured clothing shipped in interstate commerce shall be plainly labelled: "These goods can (or cannot) be cleaned."

What Government May Do

LET'S inspect all shipments, let's establish federal laboratories in all cities over 10,000, let's create the ponderous and expensive machinery of government supervision of industries; let us detail uniformed federal employees to each laundry and dry cleaning establishment to see that their part of the bargain is carried out.

Is there a hope in all this? Undoubtedly,

when business realizes that its safety from government control lies in its ability to govern itself we shall see this movement of textile men, makers, dealers, and cleaners, go forward and we shall see a hundred other industries following the example. The sitting down together of interests which once were thought conflicting is a forward step.

And the cleaners and the retailers will learn, too, that one of their strongest weapons lies in future education when the buying housewife asks her retailer: "Will this wash?" and gets from the question "yes" or "no," the battle has been won. For once on record he must look to his manufacturer for important data to keep him informed.

A long job but a worth while one, this of getting industry to govern itself and of teaching any industry how greatly it depends on other industries.

Chemistry Is Overturning Industry

By WILLIAMS HAYNES

Publisher of "Chemical Markets"

OUR great-grandfathers struggled in the birth throes of this modern industrial age when power, through machinery, was first applied to the tools of mankind.

Handicraft, as old as the caveman who laboriously chipped a bit of flint into an arrowhead, was replaced within the span of a man's life, by factorcraft. Industry stands today at the threshold of another similar revolutionary era.

Grandfathers Set the Stage

OUR grandfathers perfected a new system of distribution, new methods of merchandizing, the wages and welfare of labor, the entire fabric of corporation law and corporation finance; indeed they adjusted the whole great, complicated machine of modern business which had been created by that fundamental change in industry. It is such times of stress and strain, of economic change and readjustment to new business conditions that test the executive ability to the uttermost, for these are the times of ruin or fortune, periods of pressing danger and also of wide-open opportunity.

Our great-grandfathers, it has been said, consulted their bankers, and our grandfathers retained lawyers. Our sons will assuredly engage chemists. For along with the application of physics to industry in the extension of energy—steam or electricity from coal, gas, oil, and water power—has come the steady development of another science, chemistry. We are just beginning to apply chemical reactions to manufacturing in new ways that plainly forecast a chemical revolution of all industry; the ultimate results one can now but vaguely surmise.

It is quite certain, however, that Cartwright's first power loom and Watt's first steam engine were not more epoch-making than five chemical discoveries which, since the war, have been put into practical, profitable operation.

Is this the version of an enthusiast so close to the chemical industry that he dreams its ramifications will embrace all industrial activity? I do not think so. But let

us compare a couple of well-known products of the industrial and the chemical revolutions.

Consider first the power shovel, gouging out with uncanny skill in a short hour a greater trench than a hundred laborers could dig in a day—a direct, impressive example of power versus hand work; an example, too, of the saving in time and human effort, which indicates the broader, economic readjustments of employment and wages. Consider now a late triumph of chemistry over natural products, a synthetic paint-varnish-shellac, all in one, a single chemical product made entirely by chemical processes.

None of the age-old raw materials of the paint and varnish industries goes into the modern nitro-cellulose lacquer; none of those gums which bulk so large in Oriental trade; no linseed oil to the production of which we devoted over three million American farm acres; no turpentine, long one of the south's staple crops.

Any schoolboy can tell you the hours and the dollars that these quick-drying lacquers save the American automobile industry, while your own experience can probably testify to their own peculiar advantageous characteristics. And these lacquers are but three years old. They will be further improved.

Their price, which now stands midway between a good paint and an ordinary varnish, will be further lowered. Both these developments will widen the market, open up new opportunities, and force new readjustments.

We Soon Get Used to Newness

BUT lacquers, like the fifty million pounds of rayon we manufactured last year, are fundamentally "old stuff." Chemical substitutes for natural products are a bit of industrial legerdemain as old as paper and window glass, chemical products both, which replaced thin-scraped hides so long ago that we have forgotten they are just as true chemical substitutes as a coal-tar dye, celluloid, or novocaine.

Such chemical substitutes, though not a new conception and despite the fact that

they will not be the mainspring of the coming revolution, are nevertheless going to invade many established industries. More and more of them are sure to spring forth from the laboratories. Sometimes their invasion is a ruthless raid, as rayon is today pillaging the markets of our silk and cotton mills.

More frequently theirs is a peaceful penetration, as our consumption of vegetable lard—any fatty oil, such as cottonseed or peanut, which has been hardened by treatment with hydrogen—today equals the fat of seven million hogs, while our production of true lard has continued steadily on.

Morning Milk and Cow Hides

IT RATHER staggers our sense of the general fitness of things even to think of the morning's milk and the roast for dinner as by-products of the tannery trade, yet serious minded statisticians have estimated that, were it not for artificial leather, every single head of cattle in the country would have to be slaughtered to meet the automobile industry's insatiable demand for tops and seat coverings.

Moreover, it would require an acreage of the very finest grazing land, equal in extent to all the states west of the Mississippi, to support the herds necessary for hides equal to the world's annual yardage of artificial leather.

These same statisticians calculate that then a pair of shoes would cost \$25 and porterhouse steaks, a by-product, would sell at a few cents a pound. Of course, this is drawing a long bow with figures. Meat and milk are necessities of life; and all industry and commerce, even the ubiquitous Ford, must take second place to foodstuffs. Without artificial leather, what would happen would be that our automobile manufacturers would have to get along with some other less suitable material.

But do not discount too heavily the effect of these chemical substitutes. Before the coal-tar dye was discovered, a million acres in India were planted to indigo. But last year a nine-million-dollar American industry, distilling methanol and acetone from wood,

came face to face with these chemicals produced more cheaply and purely by synthetic processes. Last summer the powerful Japanese camphor monopoly twice cut its prices because of synthetic camphor made in France and Germany. This very fall the Chile nitrate producers have petitioned for a lower export tax (now \$10 a ton) in order that they may meet the competition of nitrates fixed from the air by chemical means. And that nitrate export tax has for years furnished some 60 per cent of the income of the Chilean Republic.

Nor will the thoughtful manufacturer discount these new chemical products as makeshifts. They cannot be laughed off as cheap "just as good" substitutes for they are often better for certain purposes than the natural products they replace. Our old friend, artificial leather, while not porous and pliable enough to make good shoes, is by the same token impervious to weather and so better for the automobile manufacturer's uses.

Celluloid gives us ivory that does not crack nor turn yellow, and a tortoise shell that is less brittle. Chemical fertilizers contain more plant food than natural manures. Novocaine is less toxic than cocaine and is not habit-forming. Thousands of housewives really prefer vegetable to hog lard, and many motorists sing the praises of lacquer finishes. These chemical substitutes are indeed serious competitors. Rayon is a

recent example how, without any attempt to masquerade, they can frankly win favor on their own merits, and popular prejudice has been so far removed that we find them taking their places in the kitchen and the family medicine chest, two splendid strongholds of conservatism.

Both Threats and Promises

IF CHEMICAL substitutes are a constant threat to old, established industries, they also give every manufacturer a sure pledge of independence in the matter of his raw materials. If the vanilla crop in Madagascar fails, as it did a couple of years ago, and shrewd French merchants corner the scanty supply, then the American maker of flavoring extracts can turn to vanillin and coumarin. Henceforth the Japanese camphor monopoly will not be able to manipulate prices at the expense of the American celluloid industry. The recent high prices of rubber stimulated much chemical research. Synthetic rubber has been made in the laboratory; some day it will be produced on a competitive commercial scale. Our stocks of tin, zinc, and copper will not last many years longer.

"What of it?" asks the chemist. Only a few years back costly platinum was essential in binding the filaments of the electric light bulb which is now done by a cheap alloy of iron and nickel. Accordingly the chemist

boasts that given time and sufficient economic incentive of demand, he will supply a suitable readjustment of the raw materials of any industry. This is no mean blessing.

Both as competitor and as supplier of new raw materials, synthetic chemistry has changed many industries during the past quarter century; and radical as these changes seem, they are, however, orderly and simple developments compared with some of the newest chemical discoveries.

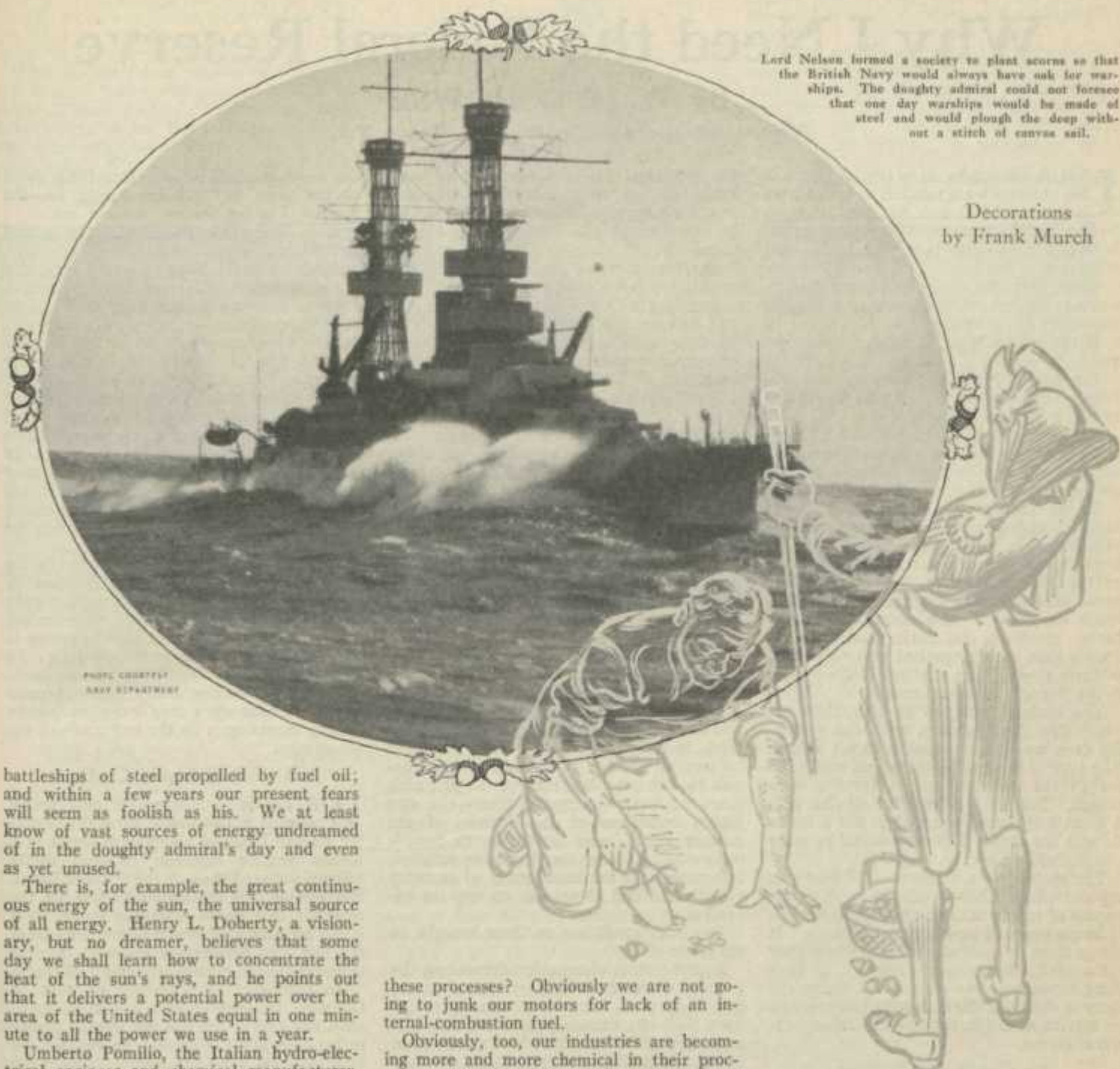
It is the result of this newest chemistry—all developed since the war—that will revolutionize industry.

Power is the slave of our industries, and power generated from chemical energy will be the crowning service of science to material civilization. President Coolidge's Committee has just reported that we have but six years' supply of gasoline. Our stocks of coal have definite limits. Water power is seldom conveniently located and long-distance transmission is always wasteful. But there are other vast sources of energy, and we shall not go powerless. A century ago wood was the chief source of energy, and we smile at the picture of the great Admiral Nelson busily founding a society to foster the planting of acorns in order that they might be in our day good oak timber to build frigates for the British Navy. We build



PHOTO BY EWING GALLOWAY, N. Y.

A government agency assures motorists that our oil resources will be exhausted in six years. There is no need for worry, however. If we have no "gas" in 1933, chemistry will have discovered another source of power.



Lord Nelson formed a society to plant acorns so that the British Navy would always have oak for warships. The doughty admiral could not foresee that one day warships would be made of steel and would plough the deep without a stitch of canvas sail.

Decorations
by Frank Murch

PHOTO COURTESY
NAVY DEPARTMENT

battleships of steel propelled by fuel oil; and within a few years our present fears will seem as foolish as his. We at least know of vast sources of energy undreamed of in the doughty admiral's day and even as yet unused.

There is, for example, the great continuous energy of the sun, the universal source of all energy. Henry L. Doherty, a visionary, but no dreamer, believes that some day we shall learn how to concentrate the heat of the sun's rays, and he points out that it delivers a potential power over the area of the United States equal in one minute to all the power we use in a year.

Umberto Pomilio, the Italian hydro-electrical engineer and chemical manufacturer, foresees a discovery of the photo-chemical processes by which the plants utilize solar energy, and he visualizes the power plant of the future as a great colony of greenhouses with gigantic glass test tubes in the place of stacks and boilers. There are, moreover, other sources of energy. Bound up in radium is an energy ten million times as great, on a pound for pound basis, as in any fuel we now use. But radium is rare and costly, so the chemist turns his attention to uranium, costing \$10 a pound, with a potential energy in a single pound as great as in 160 tons of coal.

Three Ways to Liquify Coal

THIS use of molecular energy may lie in the chemistry of the distant future, but already there have been perfected three different chemical processes for liquifying coal. If they had no importance, would both the Standard Oil and the Shell Petroleum companies acquire substantial financial and commercial interests in the German company which has developed the most promising of

these processes? Obviously we are not going to junk our motors for lack of an internal-combustion fuel.

Obviously, too, our industries are becoming more and more chemical in their processes. Tanning, glass making, dyeing and finishing textile fabrics, rubber vulcanization, paper making, steel and other metallurgical operations, even laundering, are now recognized as chemical processes.

No manufacturer, however remote from chemistry his works appear now to be, can rest peacefully, believing that he will not have a new chemical competitor or need a new chemical raw material next year. Small wonder, then, that astute boards of directors in many industries are voting funds for chemical research right in their own laboratories at their own plants. They are not waiting for their sons to employ chemists.

Striking is the inherent characteristic of all chemical reactions. The moment a chemical process is employed we get constantly new products and different by-products. Pour nitric acid on common salt; sodium nitrate (fertilizer and explosive) and sulfuric acid result. Pass an electric current through common salt dissolved in water, and at one pole is delivered caustic soda and at the other two gases, chlorine and hydrogen.

Moreover, in chemical industries there is

always the possibility of double-barrelled progress, progress from the discovery not only of new processes but also of new products. Chemical industries are always in an alert, experimental state—or they are ruthlessly wiped out by more progressive competitors—and it is well, therefore, that our American industries have so recently been through the upheaval of the war.

War Brought Useful Changes

THAT period of change and readjustment ploughed up our industrial fields for the planting of new crops.

The manufacturer of baby carriages who made gun carriages has had a training in industrial adaptation which will stand him in good stead during the coming chemical revolution. The chances are that, after fifty years of satisfactory painting, he has already adopted the use of lacquers. If he had to make his carriages out of bakelite or some new, cheap, light alloy he could do so without being driven out of business in a panic. It may well be that he will have to do so.

Why I Need the Federal Reserve

By W. M. G. HOWSE

President, Johnson-Larimer Dry Goods Co., Wichita, Kansas.

I AM A wholesaler in a city of 100,000. My customers are retailers in towns from 10,000 to 1,000 and less population in five southwestern states. The customers of my customers are largely farmers and stockmen.

What does the Federal Reserve System mean to me and to my customers and to the customers of my customers?

If the system were wiped out, would we miss it?

Are we any better off; are our trade processes facilitated in any degree by reason of the system?

The approach of another session of Congress, with the recharter of the federal reserve pending, brings these questions sharply into the foreground.

To the business man—and in that classification I include all business men from the village to the metropolis and all those in between, on the farms—the primary virtue of the Federal Reserve System is that it pools credit resources without creating a credit monopoly. The resources of many banks, mobilized and flexible, are more effective than the unorganized resources of all of them singly. The strength of the system is the strength of organization.

The business man, to be sure, does not come into direct contact with the system. He does business, as usual, with his banker. The system is a behind-the-scenes worker so far as the audience out in front is concerned. But it's a potent, for all that it is a silent and unseen agency. It has a lot to do with the show. The show would be sadly demoralized without it.

The system is to business—if I may mix my metaphors a bit—much the same as the service of supply is to an army on campaign. It keeps essential supplies on the move. It brings them in quantities needed, where they are needed, when they are needed. If anything happens to the service of supply, the army is doomed. So it is with business and its service of credit supply—the federal reserve system.

Dry Goods and Finance

I SHALL attempt no detailed recital of reserve bank administration. That's banking technique, and I'm a dry goods merchant. In any event, operation methods can be improved—if needed—with time and experience, but with recharter in the immediate offing, the system's the thing to think about.

Any highly organized mechanism is subject to faulty operation. But that's the fault of the operator and not of the mechanism. In considering recharter, it's important to keep this clearly in the foreground. Mistakes there may have been in operation. Other mistakes there may be in the future, for no mechanism is entirely "fool proof." Operative skill may be improved with experience, but it's ticklish and hazardous business tinkering with the mechanism.

The Federal Reserve System is not a magic formula. It is not a guarantee against hard times or economic depressions. It is, however, and our business experience has proved it, a most excellent shock absorber in times of stress. The federal reserve does

for individual banks almost exactly what banks do for their individual customers. It takes money on deposit from banks that are members of the system. This fund is called the "reserve." At need, member banks borrow from the reserve bank just as individuals borrow from their own banks.

Individuals cannot deposit with the federal reserve nor borrow from it directly. So their relations with the reserve, though intimate, are indirect, through the member bank.

Each Bank Stood Alone

BEFORE the Federal Reserve System was in operation, each bank stood alone. This was safe enough as long as things kept an even keel, but even then the mechanism of banking was cumbersome and stiff in the joints. To meet the requirements of the law and to pay depositors on demand, banks, before the Federal Reserve System was in operation, kept large sums of gold and currency on hand. Many of them, as well, kept large deposits in other banks in larger cities.

When all went smoothly the smaller bank's money on deposit in the city bank could be withdrawn when needed. But when, as frequently happened, business was disturbed and distrust was in the air, all banks were alert to increase cash in hand for fear an unusual number of depositors might decide to withdraw their money. In just such times as these—emergency times—the city banks, custodians of the deposits of the country banks, were least able to furnish ready cash. This for the simple but sufficient reason that the available supply of currency was limited and there was no way to expand it.

Just such conditions as these brought on the panic of 1907.

Apprehensions of a sudden demand on the part of their depositors for cash caused practically every bank in the country to call upon their city correspondents for their balances in cash to meet possible runs by local depositors, and there simply wasn't currency enough to go around. As a result—as all of us who remember that critical time recall—cash became a scarce article and bank "script" was resorted to as emergency currency to stave off a complete breakdown of financial processes.

Calling Loans in 1907

AT BEST this was a makeshift, entirely inadequate to prevent a serious disruption and tremendous losses throughout the country. Each bank simply had to go on its own. Other banks had troubles of their own and, no matter how willing, were unable to play the Good Samaritan by furnishing the ready cash necessary to meet the emergency. In consequence borrowers were called upon to pay up.

That forced liquidations and destroyed the value of property, completing the vicious circle of disaster. The defenses were weakest when the danger was greatest.

To meet this situation, to provide a flexible currency and ample reserves of credit—the need of which the experience of the country from the time of Jackson's success-

ful drive on the United States Bank down to the panic of 1907 has taught us—the Federal Reserve System was set up.

It is appropriate to describe the federal reserve as a national credit reservoir.

In this reservoir both cash and credit are stored, and from it, as need arises, credit is supplied to member banks and through them to their customers—business men, farmers, and even non-member banks. The process is much like the storing of water in a city reservoir, from which water is supplied at need and in sufficient quantities to meet both normal and emergency needs.

Member banks deposit in the reserve banks most of the gold they formerly kept in their own vaults and some of the cash they used to keep on deposit with other banks. The gold the reserve banks thus acquire gives them the ability to make loans to member banks and to issue currency.

Reserve banks can make loans to an amount between two and three times as much as the gold on hand. Having a supply of gold in storage, they have also a lending power in storage. As this lending power is used, the level in the reservoirs falls. In 1920 the reservoirs ran low, because business made unusually heavy demands upon them at a time when they had already been heavily drawn upon by the war needs of the government.

A Pool of Liquid Credit

WATER in a reservoir is only useful when it is distributed through the water mains. Likewise a supply of credit in a federal reserve reservoir becomes useful when distributed through the member banks. But just as it is the individual and not the reservoir that draws upon the water, so it is the business man or the farmer who takes the first step which may result in drawing upon the federal reserve's reservoir of credit.

To illustrate: A customer of ours in Guymon, Oklahoma, buys a bill of goods from our house. He has not enough money in bank to pay the invoice, so he asks his local Guymon bank for a loan. This is the first step.

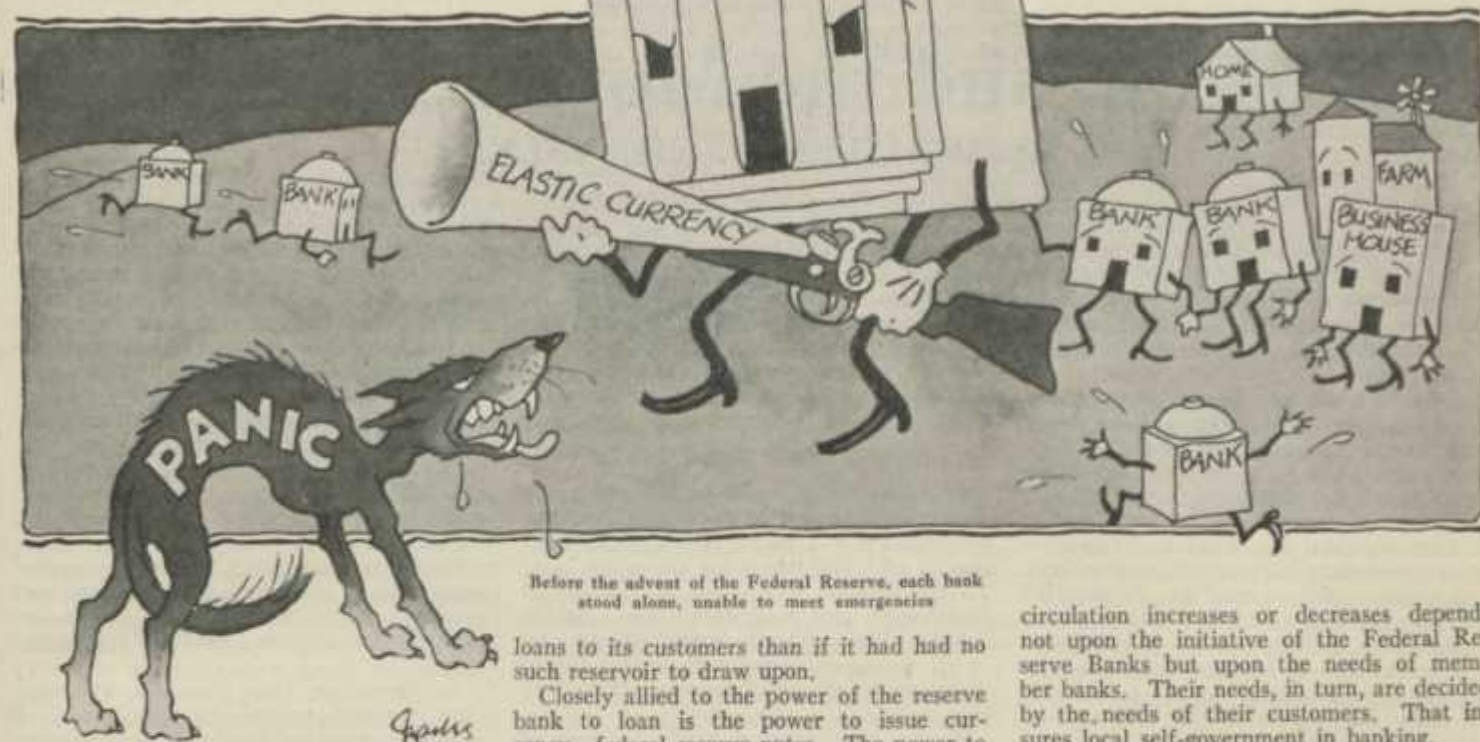
The Guymon bank, satisfied with the merchant's credit, makes him a ninety-day loan on his note. The merchant buys my goods and proceeds to sell them to his customers. As his customers pay their bills, the merchant accumulates money with which he pays off his note.

In ordinary times, a bank's own resources are sufficient for its customer's needs. But perhaps the Guymon bank, a member of the reserve system, is asked to make the loan to my customer at a time when many others are asking for loans to carry on their business and when farmers need money to finance a harvest. Perhaps, too, the bank's depositors, for one reason or another, are drawing their deposits. If the Guymon bank is to continue to lend money and to pay its depositors, it, in turn, must borrow.

Before the Federal Reserve System was in operation, the Guymon bank would have had to ask for a loan from some larger bank with which it had an account. Ordinarily the loan would have been obtained. But if money happened to be scarce, the larger

bank might be compelled to refuse the loan, because its own resources were running below what it might need to meet the demands of its own customers.

Now, however, as a member of the Federal Reserve System, the Guymon bank is in much different position. It sends my customer's note to the Federal Reserve Bank and other notes upon which it has already made loans. With these as security, it asks the Federal Reserve Bank for a loan.



Before the advent of the Federal Reserve, each bank stood alone, unable to meet emergencies

This is the second process in drawing upon the reservoir of credit, and follows the first which my customer set in motion when he borrowed from his bank. Both steps must be taken before the Federal Reserve Bank loans a dollar.

The reserve bank examines the notes sent by the Guymon bank to see whether they are sound and acceptable, and of the sort the law permits it to loan upon. Being satisfied, it makes the loan to the Guymon member bank. The rate of interest the reserve charges the Guymon bank is a published rate, applying uniformly to all member banks in the district, and is often different from the rate the member bank charges its customers. The interest rate a member bank charges its customers is determined, subject to state law, largely by local business conditions and local banking custom.

The rate a Federal Reserve Bank charges its member banks is determined largely by the store of credit-making power it has in its reservoir, and to some extent, by prevailing general credit conditions.

Where a Customer's Note Goes

LATER, when my Guymon customer's note falls due, the reserve bank returns it to the Guymon bank and receives payment for it. The Guymon bank in turn receives payment from the merchant and gives him back his note. Thus the cycle is completed. Meanwhile, the merchant has been able to buy goods from my house and pay for them and to carry on his business. The Guymon member bank, with the money it borrowed from the reserve bank, has been able to make more

loans to its customers than if it had had no such reservoir to draw upon.

Closely allied to the power of the reserve bank to loan is the power to issue currency—federal reserve notes. The power to loan would be of far less value if the power to issue currency did not go with it.

Just as the customer who makes a loan at his bank may need to draw out part or all of it in currency, so a member bank in making a loan at a reserve bank may need to draw out part or all of it in currency. The power to issue currency insures, to everyone who has a deposit in a solvent bank, ability to draw it out in currency. That explains why this country never, under the Federal Reserve System, need have a money panic such as that of 1907. It explains, too, why there was no money panic in the difficult days of 1920-1921.

Forty Per Cent Security Gold

EACH reserve bank is required by law to set aside security, dollar for dollar, against the currency it issues. The security may be either gold, or borrowers' notes shortly to be paid, representing either loans for the production or distribution of goods or farm products, or it may be loans to owners of government securities. The gold the law requires a reserve bank to keep in vault as a reserve against its currency must at all times be at least 40 per cent of the amount of the notes it has in circulation.

These notes get into circulation and pass out of circulation in much the same way as money is drawn out of a bank and returned to it.

Banks Act Like Investors

WHEN a bank's customer needs currency he draws a check on his bank and cashes it. In the same way, when a member bank needs currency, it draws and cashes a check on its reserve bank. Perhaps the member bank had to borrow at the

reserve bank for this purpose. That is how the total amount of currency in circulation increases.

On the other hand, when a customer has more currency than he needs he deposits it at his bank and perhaps pays a loan with it. Just so does a member bank at the reserve bank. That is how the total amount of currency in circulation decreases.

Whether federal reserve currency in

circulation increases or decreases depends not upon the initiative of the Federal Reserve Banks but upon the needs of member banks. Their needs, in turn, are decided by the needs of their customers. That insures local self-government in banking.

Thus the reserve system does two things.

It provides a nation-wide credit and currency system so knit together that nation-wide resources may work as a unit in a national emergency, or be mobilized to meet a local emergency too severe for local resources to cope with. It preserves, also, local self-government in banking.

In "Boom and Slump" Days

A CRITICISM of the reserve system frequently encountered—particularly in the farming areas—is that the system first stimulated a boom and later forced deflation; that it caused the headlong plunge of farm prices that marked the beginning of the depression of 1920-1921.

Let's look into this a bit. Let's begin where the "deflation" and depression began—in the farming areas. Any fair statement of the facts, it seems to me, must convince us that the system was in no way responsible for the depression that brought calamity to farmers and business men alike, but that it rather eased the blow, terrific though it was.

Yet, bad as things undoubtedly were, what might conditions have been but for the federal reserve? Had the old banking system been then in vogue, undoubtedly we would have been thrown into the maelstrom of a panic that would have made the panic of 1907—or indeed any panic in our history—look like a summer breeze in comparison with a tropical hurricane.

Review the situation as it stood in the midsummer of 1920 in the farming areas. Speculation had run wild in sections. Land values had soared. Land was sold at top prices on long-term contracts. Questionable securities were freely sold and money as

freely loaned by many banks on unbankable security. The country was dangerously inflated.

Then the law of demand and supply, inflexible as the laws of the ancient Medes and Persians, took charge of the proceedings. Some of us still bear the marks of the blow.

Yet the federal reserve came to the rescue of such banks as could be saved in the farming area. Many were beyond saving.

They simply had to go. The federal reserve can do much to save a grave situation, but it cannot forestall the results of a "busted" boom.

I'm for the Reserve System

SUCH is the federal reserve. A silent, smooth-functioning mechanism. A mechanism that works. A mechanism that absorbs shocks and jars and eases the progress of business. It is not a guarantee against

depression nor yet an absolute assurance of prosperity. Statute law cannot repeal economic law. Nor can prudence and common sense be legislated into minds that have them not.

As for me, I'm for the reserve system and recharter. I don't want to go back to the system—or lack of it—that made possible the "script" days of 1907. I believe in organization, always, as against "by guess, by gosh" and rule of thumb methods.

Parking and the Motor Industry

By WALTER P. CHRYSLER

President, Chrysler Corporation

IT IS not so long ago that much was heard about a saturation point for the automotive industry—a theoretical position in which the power of the public to purchase motor cars would become exhausted. Today not so much is heard about that saturation point because, for one reason, passenger-car production has fallen below the output in the preceding year but three times: in 1918, on account of the war; in 1921, a year of general industrial depression; and in 1924, also a year of lowered general business. It has been seen that the business of manufacturing automobiles has as much to fear from a saturation point as has the clothing industry or any other industry which produces a commodity which wears out or is capable of improvement. It has been seen, too, how the annual replacement market is growing and how the export market offers ever greater opportunities to the American manufacturer.

Who Talks Most of Trouble?

POSSIBLY the same persons who used to have quite a bit to say about the dangers of a saturation point for the automotive industry are now discussing the consequences of what is described as street and highway saturation and the lack of parking facilities. The argument has even been advanced that one of the greatest obstacles faced by the automotive industry today is the fact that many people who can afford motor cars, get along without them rather than subject themselves to the discomforts of driving in congested traffic.

No one will deny that street and highway traffic and parking offer troublesome prob-

lems to our municipalities, but those problems are not nearly as serious as they seem at first glance. The man in New York, for example, who often walks rather than rides, because he can walk more rapidly than he can ride, has one picture of the traffic situation which may be true of New York, but which cannot be duplicated in many cities.

Most Cars in Small Towns

IT IS obvious that the presence of motor cars on narrow streets is what causes congestion, so it is a perfectly reasonable question to ask: Just where are the motor cars? To the man in New York or Chicago or Philadelphia that may sound like a foolish question, but the truth is that 64 per cent of all registered motor cars in the United States are in cities and towns of 25,000 and less.

Twenty-eight and five tenths per cent of all the registered motor cars are in rural communities and in towns of 1,000 population and less; 11.3 per cent are in towns ranging from 1,000 to 2,500; 7 per cent in towns from 2,500 to 5,000; 8.3 per cent in towns from 5,000 to 10,000; 8.9 per cent in towns from 10,000 to 25,000; 6.5 per cent in towns from 25,000 to 50,000; 6 per cent in towns from 50,000 to 100,000; 11.1 per cent in cities from 100,000 to 500,000 and only 12.4 per cent in cities of 500,000 or more. Seventy-six and five-tenths per cent of all registered motor cars are in towns or rural communities having a population of 100,000 or less. Eighty-seven and six-tenths per cent are in cities and towns having a population of 500,000 and less.

While it is true that in New York there

are those who can afford motor cars and get along without them, and while it is true this condition is to be found in certain other cities, the total number of such persons is so small that it is unappreciable in so far as the automotive industry is concerned.

Any discussion of the automotive industry and its problems and the difficulties it has been responsible for should bring out that the industry is comparatively young and that, after all, tremendous progress has been made by our towns and cities in adapting themselves to the requirements of motor vehicular transportation. Let it be recalled again that in 1895 there were but four cars produced in the United States, while last year the industry manufactured 3,839,302 cars.

In November, 1903, 100 blue and white signs directing slow moving vehicles to keep near the right-hand curb were put in use in New York. I believe that those signs were the first traffic regulations ever used anywhere.

Enter Burly Traffic Cop

PRIOR to 1903 in New York there were no police rules for driving.

In 1903 three mounted policemen were placed on Fifth Avenue, New York, to facilitate the movement of traffic.

One way streets were introduced in New York in 1908.

As the number of registered motor cars on our streets and highways increased, cities and towns as rapidly as possible adapted themselves to the requirements of this new type of individual transportation. The obvious things, of course, were done first.

Cartoon by Albert T. Reid



No one will deny that finding parking space is an important problem, but it has not assumed the vital proportions yet that some predict.

Streets were widened; where conditions permitted, sidewalks were made narrower, one-way streets were introduced, arterial highways were constructed, traffic control was synchronized. But the work of rebuilding cities to take care of motor cars has been unable to keep abreast of the steady growth of the automotive industry. The result is some perplexing problems, but I for one cannot view them as insurmountable.

Building Intelligence Is Low

AMERICAN cities have made mistakes in building. One of the commonest is the lack of zoning with reference to the use, height, and bulk of buildings so as to preclude the creation of traffic congestion caused by the use of streets by such building tenants, especially during morning, noon and evening hours. Our American cities were laid out in the days of horse-drawn vehicles and low buildings. This is an age of motor cars and skyscrapers, and it is strange that someone should not have imagined the congestion which would result when low buildings were torn down, skyscrapers constructed in their place, and the same streets called upon to handle the pedestrian traffic. Of course congestion was bound to be. I have often wondered why cities in some instances did not require buildings to be set back from the original building lines so as to provide for larger sidewalks and more street space.

Another common error has been the lack of platting ordinances which would prevent the creation of new subdivisions with streets which are too narrow for ultimate use. The old idea of how wide a street should be is obsolete in these days of motor cars.

So this whole problem of traffic can be viewed from many angles. It all depends on where you live and how large your city is.

If you live in New York you have one picture, and if you have imagination you can readily think of a time when all rail traffic will be underground, when motor vehicular traffic will be overhead on motorways, and when pedestrian traffic in centers of travel will have the street level all to itself. Take a glance at 42nd Street and Park Avenue, New York, where you have subways, surface lines and an elevated motorway. It is a miniature picture of the city of tomorrow with the exception that, in my opinion, the motor bus will supplant the surface car in our great cities.

The problem looks differently if you live in a smaller city. Take Los Angeles. It is

a city with narrow streets in the business center and a great deal of motor vehicular traffic and drivers from all parts of the country. What did the city do? Very wisely it introduced a system of pedestrian control which cannot be equaled anywhere in the United States. In Los Angeles the man who walks is being told rather adroitly that the rules and regulations for motorists are not only for the expeditious movement of vehicular traffic but also for the safety and convenience of pedestrians. The result is that in Los Angeles the movement of pedestrians is governed by traffic signals just as are the movements of motor cars.

It is just as common to see an officer in Los Angeles signal a pedestrian back to the curb as it is to see an officer signal a motorist.

Street traffic has been speeded up in Los Angeles and, I believe, has been made safer with the introduction of pedestrian control.

The automotive industry as an industry is fully appreciative of the seriousness of street and highway traffic problems. Through its National Automobile Chamber of Commerce it has been doing a splendid work in making genuine contributions to traffic knowledge and has suggested methods of improving traffic.

The People vs. Reckless Driver

THE industry is inclined to the point of view that public opinion can play an important part in improving traffic by eliminating the careless driver.

The industry believes, too, that prompt punishment of the reckless by responsible courts will cause respect for law.

The industry takes the position that children are entitled to proper and adequate play space. Efforts should be made to restrict play space in the streets and playgrounds provided. In this respect some cities are negligent. Even in New York there is an organization which is raising funds from the public to provide supervisors at public school playgrounds. New York has 850 playgrounds attached to the public schools, but the city pays for the supervision of but 201 of these. Others have been opened and supervised with funds obtained by public appeal.

The automotive industry believes that every community should have a complete and up-to-date record of volume of traffic on its streets and the circumstances of all highway accidents. Such knowledge is essential in determining improvements.

Finally the industry believes that streets should be modernized to meet current needs. Dead-end streets, grade-crossings, especially in cities, drawbridges, narrow bridges, and other "bottle-necks" which obstruct traffic, should be removed. Streets must be improved for present and future needs.

It was a professional humorist who said that one of the great questions facing the American public today is: "Where am I going to park my car?" We have heard of the man who carried a collapsible hydrant with him so as to obtain a parking space, and we have heard of the car owner who walked 3 miles each day going to and from his office to where he parked his car. There are humorous aspects of the parking situation, and it is rather a serious problem in many of our communities, but again I take the position that it is really not so difficult.

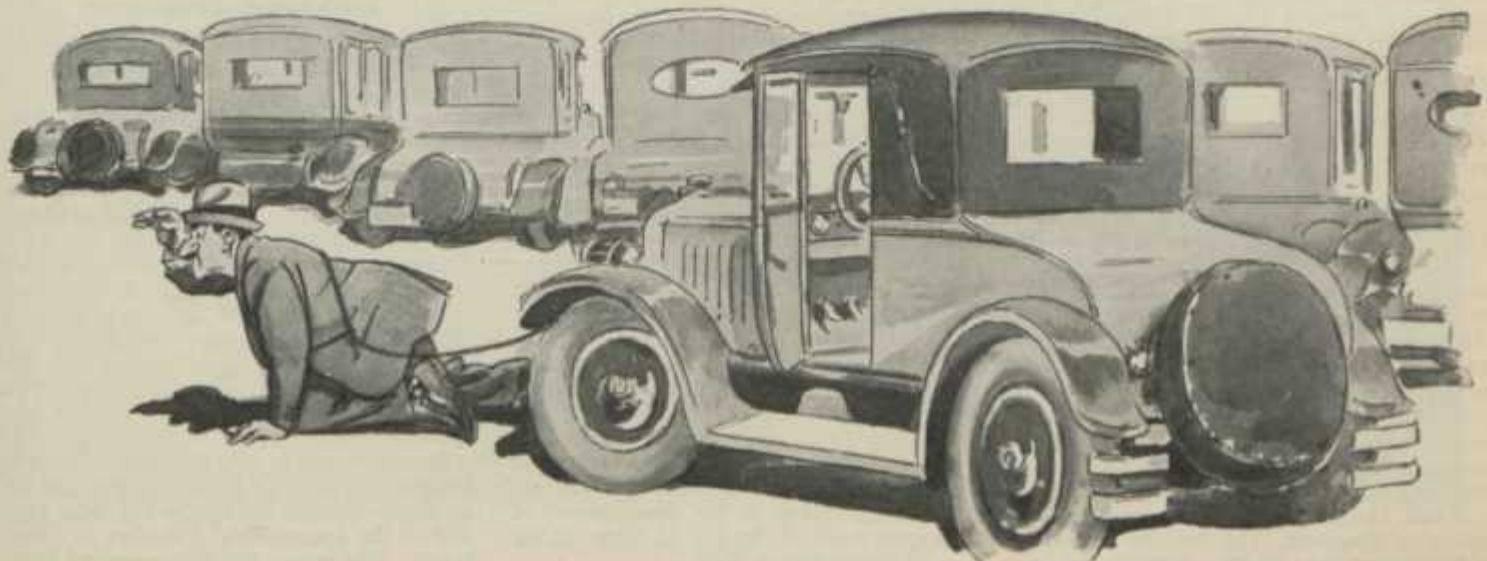
Let me take a single example of how parking conditions can be improved. On many streets which ordinarily take care of four lines of traffic, parking is permitted on one side of the street. On the other side of the street there may be loading and unloading of trucks. These trucks back up to the curb at an angle, load or unload from the rear, and a street large enough to take care of four lines of traffic is converted into a one-way street, large enough for one line of traffic. Now is there any reason why trucks cannot be loaded from the side like railroad freight cars are loaded and unloaded and trucks parked parallel to the curb? It is true that fewer trucks can be parked parallel to the curb than can be parked at an angle, but parked parallel will mean opening another lane of traffic.

Parking and the Architects

WHEN streets are widened, more room for parking is provided. When sidewalks are made narrower, more room is provided.

When a man builds a house today he usually provides for garage space. In many of our cities office buildings have been constructed with definite ideas as to how the tenants are going to park their cars during the day. The time is coming when all office buildings will give consideration to the parking of tenants' cars.

There is no particular reason why all loading and unloading of trucks should be done on the streets. Several department stores have provided for underground loading platforms and have taken many vehicles off the streets. One department store in



New York has provided garage space for its customers in a building several blocks away from Fifth Avenue, and the cars are taken to the garage by drivers and returned at the time asked by the owner of the car. This is somewhat unusual today, but it will be common soon.

The housing of automobiles is little different from the housing of anything else. Our streets are capable of taking care of only so many automobiles, and when parking interferes with the movement of traffic we can reasonably expect further restrictions on parking. Ramp garages in low rent areas will be constructed and cars parked there. Several cities today have such large motor inns where cars are parked on many floors of tall buildings.

During the recent subway strike in New York, when the increased number of motor

vehicles of all descriptions found on the streets added to the congestion of the city, no parking was permitted below 59th Street on certain streets. Certain interests in New York have attempted to make capital of the fact that the elimination of parking speeded up traffic considerably. At this writing the surface lines are carrying posters which read: "The recent ban on parking speeded up traffic." How the street car lines can argue to themselves that further restriction of traffic will add to the business of the surface lines is beyond me.

Complaints have been made in New York that parking is interfering with the loading and unloading of merchandise. The further restriction of parking privileges has been asked. The department store owners immediately protested, pointing out that motor car business, so called, was an important

item of their business. Just how this parking problem looks to you depends upon where you live, how large your city is, and how congested it is.

To many millions of motorists parking is no problem. To the resident of New York it is a real problem. But the ramp garage in low rent areas is going to play an important part in solving the problem.

The plain truth is that the American public wants its motor cars and it wants to be able to drive them easily and safely, and few communities will be content to sit still and allow traffic and parking difficulties to make it inconvenient to operate a motor car.

I have no fears for any saturation point, and I have no fears from street and highway saturation. I appreciate the seriousness of our traffic problems, but I believe the application of a little imagination will help.

Sweden to Welcome World Chamber

GAY, GORGEOUS Stockholm, "Venice of the North" and capital of Sweden for more than 700 years, will be host to the business men of the world June 27 to July 3, 1927, when they meet to discuss the unsolved problems of world commerce, industry, and finance.

Swedish business leaders are preparing a welcome in the best traditions of Swedish hospitality which assures the delegates of gracious cordiality. All group and general sessions except the formal opening will be held in the Houses of Parliament guaranteeing commodious and unified accommodations. The large and beautiful Concert Hall will be used for the opening ceremonies.

Business Men of Forty Nations

LONDON, whose storied romance is particularly alluring to Americans, grandiose Rome, Brussels with its Flemish picturesqueness, all have entertained various General Congresses of the International Chamber. Now Stockholm, as the representative city of a country that was an early adherent and always a staunch supporter of the organization, claims the honor, and business men from forty nations will meet there for the Fourth General Congress.

The Rome meeting in 1923 brought together 540 representatives of the business world. Brussels in 1925 saw an assembly of 753 delegates from 33 countries and 15 international organizations. The attendance at Stockholm promises to be even larger, due to the growing prestige of the International Chamber.

Frank Discussion of Problems

AT THIS meeting the work of the International Chamber since the Brussels meeting, the studies of its experts, the result of its world-wide investigations, the proposals and recommendations of its international committees, will be brought before the membership of the Chamber for review and decision. The discussion will probably be, as in the other meetings, frank and free. The organization has no political connections or implications. It is solely concerned in bringing the combined wisdom and experience of the international business world to bear on the problems confronting it. The meetings have always said what they meant and meant what they said.

Trade barriers will take up most of the delegates' attention. The chamber has made a particular study of the question and ac-

cumulated a mass of relevant material. Etienne Clementel, one-time Minister of Finance of France, is chairman of the Central Committee. R. W. Boyden, former American unofficial observer on the Reparations Commissions, is the vice-chairman and American member.

Each National Committee has collected evidence from the business men of its country as to the difficulties that it finds in transacting international business, either the hampering regulations imposed by their own country or those of another. A complete report based on the observations of the national committees is being prepared under the direction of Hartley Withers, former editor of the *Economist*. It will deal with unreasonable customs regulations, arbitrary import and export prohibitions, unreasonable consular fees and procedure, discrimination through arbitrary customs classification and analysis, tax discrimination, legal barriers affecting the rights of foreigners, restrictions on transportation, governmental and private monopolies of materials and trade.

A Latin-American Procedure

SEVERAL South American countries have regulations that give to the discoverer of an error in import documents half the fine imposed for violation of the required procedure. This has led to the creation of an army of spies searching each document for the slightest error. Even though the mistake is obviously clerical and is corrected, the fine is never refunded. This is but a slightly consequential fact, yet it is profitable to get rid of such thorns in the flesh.

Julius H. Barnes, former President of the National Chamber, is the chairman of the American subcommittee that is studying the problem of trade barriers. The other members of the committee are Walker D. Hines, former Director General of the Railroads and former arbitrator of river shipping under the Peace Treaty; F. Edson White, President of Armour and Company; John N. Willys, President of the Willys-Overland Company, and C. F. Weed, Vice-President of the First National Bank of Boston. This committee has had the generous cooperation of the principal organizations and individuals engaged in the export trade. The committee has sent a report of the difficulties and obstacles encountered in the development of the export trade of the United States to the Central Committee at Paris.

Although the final program of the meeting will not be fixed definitely until the Council of the International Chamber meets in Paris on October 20, there will be at the Congress discussion of double taxation, protection of industrial property which covers the international protection of patents, trade-marks, designs, etc., international telephony with particular reference to the development of a continental system that will serve European business better than the now restricted service, and other subjects that are deemed important will be studied.

Sweden Little Understood

SWEDEN is for most Americans a too little known country. The name means little more than matches and ski-jumpers. Yet since 1913 our exports to Sweden have increased 349 per cent and our imports 364 per cent. We ship large quantities of unmanufactured cotton, refined copper, gasoline, automobiles, bacon, and leaf tobacco; and we import chemical wood pulp, unbleached sulphate, wrapping paper and matches in return. In 1924 our exports amounted to \$42,000,000 and our imports to \$40,000,000.

Stockholm and Sweden have much to offer the visiting business men. There is the famous iron industry, the highly developed wood-pulp and paper manufacturing plants, the electrical industry, and the unique development of the match industry.

Picturesque Stockholm

STOCKHOLM is built at a point where the waters of island-dotted Lake Malar rush into the Baltic. There is a trim and orderly beauty relieved by the variety of modern and mediaeval architecture, both of real artistic merit. Instead of these two styles clashing, native feeling has been able to weld them both into a harmonious whole. The city has been able to adopt the most modern of comforts without a sacrifice of any of its historic charm. It is interesting to note that the town hall completed in 1923 vies with the ancient Royal Palace as a center of interest, though they are so different. From the city, a country of great natural beauty, picturesque and colorful, can be easily reached.

Transportation and hotel accommodations for the American delegates to the meeting are being arranged for by the American Section of the International Chamber of Commerce. The details will be announced later.

Stockholm, Sweden,
the Venice of the
North, host to the
annual meeting of the
International Cham-
ber, June, 1927



Syden's House of Parliament, where International Chamber sessions meet.



Reminiscent of baronial keeps and strongholds is this view of Stockholm's City Hall from the lake



Left—Untouched by modern progress is this bit of mediaeval Stockholm

Below—The flavor of the modern city. The Norrstrom, the Quays and the Grand Hotel in the middle background



The Silent Revolution in Railroading

III—Carriers and Shippers' Advisory Boards straighten out Florida embargo tangles, and tackle sheep ranchers' marketing problems with equal success.

By F. S. TISDALE

IT IS a sad but solid fact that man in his present undevelopment finds tribulation more interesting than good works. Perhaps it is a hold-over of the bad-little-boy streak that would rather kick over a house of blocks than build one. Anyhow, most of us would be better entertained by the description of one king blown up than by the births of ten crown princes. Battles make better reading than peace conferences. Prayer meetings usually have a thin attendance. There is always a good crowd at a dog fight.

This curious kink in human nature is the only explanation I can discover for the fact that transportation in the United States has undergone a wholesome revolution in the last three and a half years without attracting any particular attention from the body of American business. You would have heard about it plenty if the railroads had broken down. Instead they have been hauling record freight loads with greater speed—so there wasn't anything to tell.

Shippers Help the Roads

THE RAILROADS have done much through improved equipment and cooperation in the use of cars—a cooperation that preserves the advantages of car pooling without its many evils. But the carriers could not have accomplished what they have without the aid of shippers, receivers and other commercial interests—help furnished through the Regional Advisory Boards. These are made up of committees of carriers working with committees of other business interests. The members serve without pay; their only aim and reward is the working out of traffic troubles without the interference of governmental agencies.

These boards are a far-reaching example of the new tendency by which American business is policing its own ranks and settling its squabbles out of court. Donald D. Conn, manager of the public relations department of the Car Service Division of the American Railway Association, puts it this way:

"There is something inherent in this affiliation of the public and the carriers that is of very great consequence. I refer to the probability of conducting the Advisory Boards on such a high plane and of developing the voluntary cooperation between every phase of agriculture, industry and trade so that the vast majority of all relations may be settled 'at home' without resort to a 'third party'—the government."

Ah, but what about government?

To the everlasting credit of that large and busy order, it must be recorded that the Government views labors of the Advisory Boards with great enthusiasm. No one can deny that much interference of government in business has been brought on by urgent

There's not the talk about Government ownership of railroads today that there was several years ago. One reason is that the improved quality of service weakens the politician's plea for Government ownership, such as a United States Senator made at Rochester last month.

A great business—transportation—is regulating itself. To this end it called upon shippers for aid through Regional Advisory Boards. As a result, car distribution is going ahead smoothly, even though recent freight loadings were the heaviest of record. Its further assistance to agriculture in orderly marketing may be just over the horizon, through industrial decentralization and scientific rate revision brought about by the roads and shippers themselves.—The Editor.

invitation. In its rôle as teacher it does not enjoy having its apron strings yanked by the boy who gets the black eye every time there is a row in the school-yard.

The advisory board idea was applied to the rest of the country after it had worked successfully in the northwest early in 1923. On that occasion a paralysis of grain shipments was threatened, and to prevent it the interests concerned put in effect rules that practically revoked orders of the Interstate Commerce Commission and the state utilities commissions. These organizations have since kept a watchful eye on the progress of the advisory boards, but their influence has been used to help and strengthen them.

The quarterly Advisory Board meetings are attended by representatives of the Department of Agriculture, the Federal Reserve System and the Department of Commerce. Secretary of Commerce Hoover says that "these associations, established systematically throughout the country, have become a vital part of our transportation fabric."

Car Shortages Disappeared

SUCH endorsements have been earned by feats in railroading that would have been impossible a few years back. For twenty years before the establishment of the Northwest Board the District had suffered from an annual car shortage; since then it has been free from all transportation disabilities. The orderly marketing of grain has done much to clear up the political fevers that used to torment these states. Again: The curse of a certain western district was a weekly peak in shipments of sheep. At the end of every seven days the ranchers poured their flocks into the markets, clogging the yards and overloading the demand. Result: a regular break in prices, no end of irritation in the return of cars, claims for losses, hard feelings and a powerful lot of cussing. The Regional Board—made up of ranchers, packers, railroad men and all other affected interests—tackled the mess. Advance information of car orders and shipments was furnished ranchers and shippers. By looking at this sheet a farmer could tell when too many sheep were moving toward the big centers, and he knew that if he added to the surfeit the result would be a lowered price.

Thus instructed, the

ranchers kept out of glutted markets and fed their shipments in when reports showed light receipts. The effect was to spread the excess over the rest of the week, and the stabilization in shipments cut down the previous great swings between high and low prices. Figures proved the dollar-and-cents gain to

the rancher by the new device.

Before it went into effect the season's prices ranged from 10½ to 16 cents. After the plan was inaugurated the spread was reduced to one-fourth of a cent! It varied from 13¼ to 14 cents. According to the president of the Idaho Wool Growers Association, the plan was worth \$250,000 to the growers of his state alone.

Advisory Boards and Grapes

IN A PREVIOUS article I described how the Advisory Boards solved the difficult problem of the California grape crop. Through the cooperation of all concerned in the New York Terminal District, the receipts of grape growers 3,000 miles distant were increased by more than \$5,000,000.

The most spectacular feat of all was the handling of freight for Florida during the famous boom. Before this phenomenon had materialized there was a meeting of the Southeast Advisory Board, whose district included Florida. It had always been an exporting state—that is, the bulk of its shipments moved outward. It was well served by the railroads and refrigerator car companies. Grapefruit and garden truck traveled northward, and each season brought in its fat crop of tourists. A good many business men considered that God was in heaven and all was right with the transportation world so that the Florida delegation and Florida in that particular meeting of the board was somewhat tepid.

Came the boom—as they say in the movies—and Florida's rail problem was suddenly

Driving sheep to market from a Western ranch. An advisory board undertook to correct the system by which once a week the sheep market was flooded and prices depressed. Complete market information and proper handling of equipment spread the shipments over the seven days and stabilized prices. The plan saved a quarter million dollars for Idaho ranchers.



reversed. Materials of all sorts began to pour into the state from every point of the compass. Some of it had been ordered; much of it was shipped in hopes that a buyer would be found after it arrived. Terminals jammed tight. Embargoes quarantined the district against further shipments. And Florida yelled for help.

Help came—after a decent interval which impressed on the district the error of a careless attitude. M. J. Gormley, chairman of the Car Service Division of the American Railway Association, hopped down to Florida. Here's how he describes the crisis:

"At Tampa I saw every available track space filled with loaded cars. Very few of them were being unloaded. There was a case of 75 cars of lumber shipped there by one concern. We could find no information as to who was to handle it. Upon wiring the consignor he advised that in a few days he would send a salesman down to sell the lumber. By the time the representative arrived all tracks were blocked, no other lumber could be sent in, and naturally he sold his shipment for fancy prices."

At another town the sidings were packed with cars containing furniture and equipment for a 400-room hotel. The railroad men found that the hotel had not even been started.

Immediate Action Needed

TO HANDLE this unprecedented situation the Florida Division of the Southeast Shippers' Advisory Board was organized. There had been appeals to the Interstate Commerce Commission, and they too rendered assistance through their Bureau of Service, but the major problem was left to the shippers and railroads to work out.

Immediately the state was divided into ten terminal districts. Each of these was cut into sections by the Terminal District Committee. Small Sectional Committees were set up composed of four or five business leaders. The director of this Sectional Committee was a member of the Terminal District Committee. This organization inverted the plan that had been used with effect upon shippers who ask for too many cars; every month each receiver had to file his statement of car requirements with the chairman of his Sectional Committee. And this is how it worked:

A Fort Lauderdale contractor would report to his sectional chairman, "I want 100 cars of yellow pine lumber." He would

have to justify to his chairman his need for that lumber—prove that he needed it for building and not for speculation. Next day this chairman took all his section's requirements to the meeting of his Terminal District Committee.

Information Prevents Chaos

THE first of each month saw the totals compiled by the Florida Division, and each railroad knew from the figures exactly how many cars of brick, lumber, cement, etc., they would be expected to handle. If the carriers decided that they could handle only 75 per cent of these requirements, the word went back down the line and each receiver was allowed 75 per cent of what he wanted.

At first there was some kicking against shaved estimates and embargoes. But in the friendly discussions around the conference table the receivers and shippers had to admit the plan was better than chaos. A group of lumbermen were asked during the boom what would happen if the lumber embargo were suddenly removed. The reply was prompt.

"If the embargo were cancelled today, 10,000 cars of lumber would be shot into Florida during the next seventy-two hours."

Gradually the congestion dissolved; an orderly flow of commodities took the place of haphazard shipments.

Florida, freed of the evils of boom conditions, has resumed her healthy and inevitable growth. But since the state presents an unusual problem, it is to remain as a separate division of the Southeast Board. The organization is there in case avid outsiders stir up another orgy of speculation. In the meantime the Florida Division is consolidating its lines and preparing to take a comprehensive survey of its needs and possibilities.

You are amazed in a study of the Advisory Boards that such an immense organization could be built up in so short a time. The accomplishment is another proof of the change in heart on the part of American business. Instead of the old dispensation in which every man was for himself and the hindmost consigned to the devil, we have a nation-wide organization wherein every man is for the common interest with no provision at all for the devil.

Disregarding the artificial divisions of geography, the United States has been lined off into thirteen districts. There is an Advisory Board for each, made up of the committees of rail officials, and committees of

each business interest. They meet every three months. Not only are differences ironed out at these meetings, but reports are made forecasting the car requirements of each group, and each road reports the conditions of its equipment.

To take a typical case: The board has its executive committee and its contact committee of the carriers. There are separate committees for each commodity group, such as iron and steel, brick and clay products, cement, canned goods, lumber, chemical industry, etc. Other interests such as banking and commission merchants are also represented.

Say that through the chairman of the Livestock Committee a kick against rail service is registered. At the isolated station of Blank, facilities are inadequate. Though a great many cattle are shipped from the nearby ranches there, is no agent. Shippers must travel 20 miles by a bad road to get information on when trains and empty cars will arrive.

Quick Settlement of Disputes

THE question of placing an agent at Blank is taken up with the individual railroad. If the shippers decide that they are not getting quick enough action from said railroad, they may take the matter up with the Carriers' Contact Committee of the Advisory Board. If they still feel that they are not getting a square deal or a sufficiently prompt deal, there is yet another appeal available—they can go up to the Executive Committee of the Board. Few disputes have arisen that could not be settled by these agencies without calling on the Government. A debated question may go from the bottom of the Advisory Board to the top within two weeks' time.

In examining the short but heartening annals of the Advisory Boards there is an anecdote that continually crops up. A visitor was going through an insane asylum. He was surprised to see a single guard surrounded by a group of crazy patients.

"Aren't you afraid," he asked, "that they will all make a rush for you some day and overpower you?"

The guard grinned.

"No chance," said he. "To do that they'd have to get together. And crazy people never get together."

The success of the Shippers' Advisory Boards is evidence that our business interests are daily growing saner.



NATION'S BUSINESS

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MERLE THORPE, Editor

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Can't Business Settle the Rate Question?

NATION'S BUSINESS has told in the articles on "The Silent Revolution in Railroadings" how business, working as a unit has solved problems of railroad service.

Why not apply the same principle to the question of freight rates?

In a recent address, Robert C. Ross of Chicago thus raises the question:

Now is the time . . . to suggest to the shippers of this country that they organize along commodity and group lines functioning around the various territorial rate committees for the purpose of considering together in informal conferences all complaints regarding rates; and that vigorous attempts be made to settle these matters without reference to governmental authority.

A fine suggestion and one upon which the business men of the country should act. Our present method of dealing with rate problems is clumsy and wasteful. When shippers decide that their rates need readjustment, they file a formal complaint with the Interstate Commerce Commission and carry on for months, or even for years, litigation that is tedious and expensive.

The Southern Class Rate Investigation, started in February, 1922, and decided in July, 1925, cost shippers and carriers more than \$1,000,000. In all 4,000,000 words of testimony were taken.

Or consider the Eastern Class Rate Investigation which started in May, 1925, and has not yet reached the stage of final argument. The railroads presented a united front in this case, but the shippers were hopelessly divided. The group from eastern New York raised a large special fund to employ legal and traffic counsel to urge their particular solution of the question at issue. The Buffalo group raised a larger fund to present a different solution. New England and the Virginia cities each employed their own counsel to present their separate viewpoints. Western shippers centering in Chicago said:

"We are directly concerned in this case. Our roads interchange with the roads in Eastern territory. We want hearings in Chicago." And they had them.

In this case as in the Southern Class Rate Investigation the record is voluminous and confusing, and the Commission will have great difficulty in reaching a satisfactory decision of questions, many of which might far better have been settled through conference between shippers and carriers.

Now there looms a similar class rate investigation in the west; but the western shippers are trying to avoid long and expensive litigation. They have formed a committee of shippers to work with the carriers on the Western Line Rate adjustment. A temporary basis involving numerous rates has already been determined upon and put into effect pending a permanent solution which the shippers and carriers are trying to work out in conference.

Cooperation and common sense will solve most business difficulties.

How Life Insurance Grows

IN A RECENT address to the National Association of Life Underwriters, Julius H. Barnes called attention to the fact that insurance contracts called for the payment of \$72,-

000,000,000 within the lists of men and women now living.

A startling figure, indeed, more startling perhaps when we think of it in terms of population. There are in round numbers 120,000,000 persons in this country, so that each of us, man, woman, and child, has some \$600 of insurance. Our theoretical family of five in this country is disappearing. Father, mother, and three children are less common than father, mother, and two. Suppose, then, we think in terms of families of four, and we get an average life insurance protection of \$2,400 or more.

But it is not the total protection nor the average protection that is most appealing. It's the growth. In 1900 we had some 75,000,000 folk living in the United States and they had \$8,500,000,000 of insurance in force, a little more than \$100 apiece. Nearly six times as much as today.

And the number of policyholders has increased. A quarter century ago there were 10,000,000—one policy to every seven and one-half of the population. Now we have 54,000,000—one in every two and one-fourth.

A wonderful showing for American foresight and thrift.

The Inefficient and the Government

WHERE might the practice of the Federal Trade Commission's recommendation that "the obviously incompetent ought to be eliminated" from the grain trade lead us? How separate the competent from the incompetent?

And if the grain trade, why not the retail shoe trade? If statistics prove that a certain sized grocery store cannot successfully carry over ten cans of tomato soup, should the government inspect the store regularly to see that it doesn't carry more than ten? If it is proved that there should be, in the interest of economic stability, but one hardware store for every four thousand people, should the government license hardware stores?

There is a social cost to an inefficiently run business, but will government supervision eliminate that cost? What will be the cost of eliminating failures if it also eliminates successes?

The Plight of King Cotton

COTTON has gone to thirteen cents. This is below the average cost of production. It means to the cotton farmer a lowered income. It means for the cotton community that the bank cannot expect the prompt payment of loans, that the merchant cannot expect the prompt payment of bills. It means to the business of the country that the buying power of the cotton states may be decreased by, it is variously estimated, from \$200,000,000 to \$350,000,000.

But this does not mean that the South is facing either an agricultural crisis or a panic. The people of the South have had prosperity—the banks have money—the diversification of industries and interests—the influx of outside capital have all contributed to what is now called "The New South—the land of opportunity." There is a pride in the South—and there is a pride for the South throughout the whole country. But the situation facing the cotton grower is not pleasant to contemplate—particularly by the cotton grower himself.

The cotton grower wants a price for his product which is above the cost of production. Can he get it in the face of a more than 3,000,000 bale surplus? And if he can get it, how?

There will be those who will appeal to Congress for direct aid. There will be those looking for political gain who will promise direct legislative aid.

As a practical matter of fact, if those who offer direct government aid through legislation can possibly deliver it—which is doubtful—there is no possibility of securing it in time to do the cotton farmer any good on this year's crop. For the great bulk of the cotton crop is picked and ginned

between September 15 and December 15, and those who are in financial straits will have to sell as it is picked. Congress convenes on December 6.

No legislation can be passed by Congress before January—too late for the farmer.

But there is a group to which the farmer's position should appeal, provided the farmer will do his share. The manufacturer and the merchant do not want a lean year. The bank does not want to carry a load of unpaid paper. It is to the interest not only of the local community but of the nation that King Cotton shall not be sick.

One proposal has been that the bankers of the South shall purchase and withdraw from the market three million bales of cotton, advancing to the seller 60 to 80 per cent of the market value. Another proposal is that Agricultural Credit Corporations shall be established for the purpose of financing some such plan.

The Intermediate Credit banks have over \$500,000,000 available to lend. Any reputable group can form an Agricultural Credit Corporation and secure ten times its capital for the purpose of financing the farmer.

There are other such proposals, each of them having some merit. But the success of each plan rests on one proviso: Can the farmer guarantee that he will reduce the acreage of his cotton planting next year?

Making Taxation Less Painful

THE Bureau of Internal Revenue now has on hand more than 100,000 unadjusted personal income and corporation tax returns which date back four years or more. During the fiscal year 1925 more than \$150,000,000 which had been collected from taxpayers of the country had to be refunded because it was not legally due.

During the same year the Government paid out some \$31,000,000 in interest on taxes which had been collected and later refunded. The entire administrative expenses of collecting internal revenue taxes in 1925 were approximately \$37,000,000.

In other words, during the year in question the interest charges on deferred adjustments cost the Government almost as much as the total cost of collection. All this illustrates the intricacies and idiosyncracies of our present Federal internal revenue system and the consequent loss at both ends. The taxpayer is put to annoyance and expense and his taxes are increased because the Government must pay interest on the taxes which it has illegally collected from him.

The last Revenue Act provided for a joint committee on internal revenue taxation, to be composed of 10 members, five from the House and five from the Senate. This committee has been selected and near the close of the last session of Congress met and elected Congressman Greene as Chairman. The functions of the joint committee as defined by the statute are primarily to investigate the operation, effects and administration of internal revenue taxes and propose methods of simplification. A final report must be made not later than December 31, 1927.

The present internal revenue law is admittedly largely a patchwork affair. During the war, the prime essential was to raise money without too much regard to the niceties or equities of the situation.

Since the war, the Internal Revenue Act has been repeatedly changed by a piecemeal process, lopping off a tax here and reducing another one there. There has been no systematic overhauling of the law and no serious attempt made to develop a simplified, properly balanced normal peace-time program of internal taxation.

The possible field of activities and usefulness of this joint commission is wide and it has an excellent opportunity to

accomplish constructive results. A genuine public service can be performed by making, with the aid of expert assistance, a thorough systematic and scientific study of the internal revenue system, accompanied with constructive recommendations. Will the committee live up to its opportunities?

Silver and Fringe Markets

THE silver rupee, medium of exchange in India for centuries, will be less prominent in the financial scheme of things there if the recommended reforms of the Indian Currency Commission are adopted. A gold bullion standard is the ultimate object of the recommendation.

Adopted, it will mean that India will cease to be a buyer in the international silver market as a state, and to a lesser degree through purchases of individuals.

Hoardings, estimated to be as high as a third of the world's all-time output of silver, possibly will be slowly released into international markets. Of the annual yearly production of 240 million ounces, India has for the past few years been absorbing a third.

No one knows just what ramifications will take place in the near or distant future. One fact stands out. Since over half of the world's silver production comes from by-products of copper, gold, lead and zinc mining, there will be no appreciable curtailment of the amount of silver produced. This makes it clear that there will be adequate opportunity for the silver mining industry throughout the world to find new markets for its product, developing entirely new uses for the precious metal in arts and industries.

Again the "fringe markets" of today may be the primary markets of tomorrow.

Patriotism and the Pocketbook

WHAT the *London Nation and Athanæum* calls "commercial salvation by sentiment," or the "trade within the Empire" movement isn't working. Figures show that in spite of "beating the Imperial drum in a commercial sense," Great Britain's trade with her dominions is decreasing in comparison with America's trade.

This example shows again that patriotic appeals have very little effect when they touch business transactions. In occasional instances and under unusual circumstances these emotional pleas have worked, but under ordinary conditions "Buy at Home" must mean "Buy Better at Home."

For after all there are only two reasons for buying at home; either you get more in goods or service, or if the two values are equal a purchase at home means that some of the purchase money will come back to you.

No. "Commercial salvation by sentiment" doesn't work.

Ratify the Turkish Treaty!

THREE years have passed since the American Government negotiated a treaty at Lausanne for the resumption of diplomatic relations with Turkey. This treaty has never been ratified by the Senate. All of the important nations of Europe have ratified treaties with Turkey that give them no more favorable terms than are offered this Government by the Lausanne Treaty. To hope for a better treaty is futile.

All commercial, educational, religious and philanthropical organizations that are directly concerned with American relations with Turkey are in complete agreement as to the urgent necessity for ratifying the pending treaty.

Hope is found in the fact that the Senate has agreed to take up the treaty for consideration immediately after the holidays next January. Failure to ratify will mean a continuation of American losses in many directions that are now resulting from the lack of a treaty relationship with the Turkish Government.

The City Beautiful, and Useful, Too

By JOHN IHLDER

Manager, Civic Development Department, United States Chamber of Commerce

A LEADING citizen of a prosperous city in the middle west said recently that he is disillusioned. His city, he added, has gone too far in civic improvement. He was one of the advocates of zoning regulation and one of the most ardent supporters of park extension. Now his business associates are beginning to complain that the zoning regulations prevent their putting up the kind of business blocks they want, and the park system handicaps industrial expansion. He thinks that he probably made a mistake in his former enthusiasms.

As he goes into detail regarding these former enthusiasms of his, it becomes evident that he *did* make a mistake, a mistake made by a considerable number of business men. He had gone into these civic projects on a wave of emotion and without any clear realization that they have an important business angle. He had gone into them, not as a business man to study them from a business point of view, but as a "city beautiful" enthusiast who thought he was indulging in "altruism."

Practical vs. Aesthetic

SO HE gave free rein to those repressed desires of which we hear so much these days and left his business experience and sense of practical values back in the office along with his private business problems.

He was—and is—fond of his city and proud of his city; as most successful men are fond and proud of the city in which they have achieved their success. But he had never really thought about his city as a business proposition. Of course he had noted with satisfaction the growth of bank clearings, increase of population and trade and rising real estate values. He had often repeated the slogan that the city needed "a business administration" instead of the customary political one. He had often stated emphatically that the tax rate should be kept down and, despite his disillusionment, he is likely to vote again as he has in the past, for candidates who will promise to do what so many have promised and *not* done. Probably he has been interested in securing new industries, and very likely that is where he discovered a conflict with his former enthusiasm for park extension. He was—and is—a good citizen. The trouble is that he did not bring to his civic work the most valuable contribution he had to make—his practical experience as a business man. He thought the two phases of his life were separate.

In the earlier days of civic work—say a decade before the World War—this was not so much of a handicap, and perhaps it was inevitable. Most things start on emotion so far as the majority of us are concerned, though there usually is a thinker somewhere in the background who calculatingly makes the appeal to our emotion. We were then becoming conscious of the defects of our cities. They were mere by-products. We had been so busy developing natural resources and assembling profits which enabled us to go to Europe and see what older nations had done in the longer time they had to do it, that we had slapped our cities to-

gether in any way that was most convenient at the moment.

Our idea of civic improvement in those days was usually in terms of ornament, a monument, flower boxes on the window ledges of an ugly office building, or, when we were thinking big, a public park so far out from the business district, often beyond most residence districts, that we never thought of it as having any connection with our work-a-day life, much less of its interfering with industrial expansion or blocking the route of needed arterial highways. "Altruism," therefore, seemed a mild and harmless dissipation in which we could indulge without misgiving. We thought that it affected nothing of real consequence.

What downtown squares or parks we had were mostly left-overs from a few ancient visionaries like William Penn or were happy accidents; rescued dumping grounds along marshy water fronts that did not make good building sites, fortifications like the Batteries in New York and Charleston, community pastures and training grounds like the Boston Commons, which had outlived their original purpose but had lived long enough to appeal to sentiment.

The annals of those pre-World-War days contain accounts of the heroic battles fought by altruistic patriots to save these little breathing spots from the man who would divide them into building lots, "increase the taxable value of the city," and make a profit for himself, or from the practical politician who would save the taxpayers' money by erecting public buildings on them—as he succeeded in doing in the case of Philadelphia's monstrous city hall.

During the decade before the World War we were slowly emerging into a larger conception of our development, doing jobs that themselves were fragmentary or piecemeal, but jobs significant of what was to come; demolishing old rookeries in the worst of New York's crowded slum areas and substituting playgrounds, creating Chicago's fine playground system.

These were not consciously fitted into any plan for the whole city, though, of course, we had plans for our cities then; every city from Philadelphia on has had some kind of plan. But we had not put into these plans the quality of brains we had put into our private business. So our cities were rather haphazard affairs; commonplace with their rectangular blocks, inconvenient with their street jogs and roadways running straight up steep hillsides; ugly with their miscellany of incongruous buildings. They did not compare well with the handsome old cities of Europe that excited the admiration of American tourists. The Chicago World's Fair gave us a vision, crystallized our emotion of discontent and started us off on the trail of "the city beautiful."

Ourtown as a City Beautiful

THERE was no real business basis for this in spite of all the talk we heard about the dividends Paris and Venice earn on their beauty. No Ourtown business man ever sat down and figured how much his town could afford to spend on the prospect of

diverting tourist travel from Paris to Ourtown. But he did half believe, without any figuring, that the creation of a civic center would do just that thing. He believed it because some one told him so and he liked to hear it. A little later his city planning committee put into his hands a convincing and beautifully illustrated book containing many pictures of Paris as it is and Ourtown as it will be. Unless he has forgotten about that book, it is possible that he is disillusioned.

Since the war our old-time easy-going optimism and "altruism" have not been so much in evidence. As a nation we have suffered considerable disillusionment. We have experienced the well-known emotions of the man who first discovered that hell is paved with good intentions. And for a while some of us, grown cynical, decided to have nothing more to do with good intentions. But fortunately, habits carry on for a long time. They carried on in this matter of city planning, city building, until we slowly began to wake up to the fact that the thing is really a practical proposition, that it applies to the structure of the business districts as much as it does to the placing of playgrounds.

The City Useful Comes In

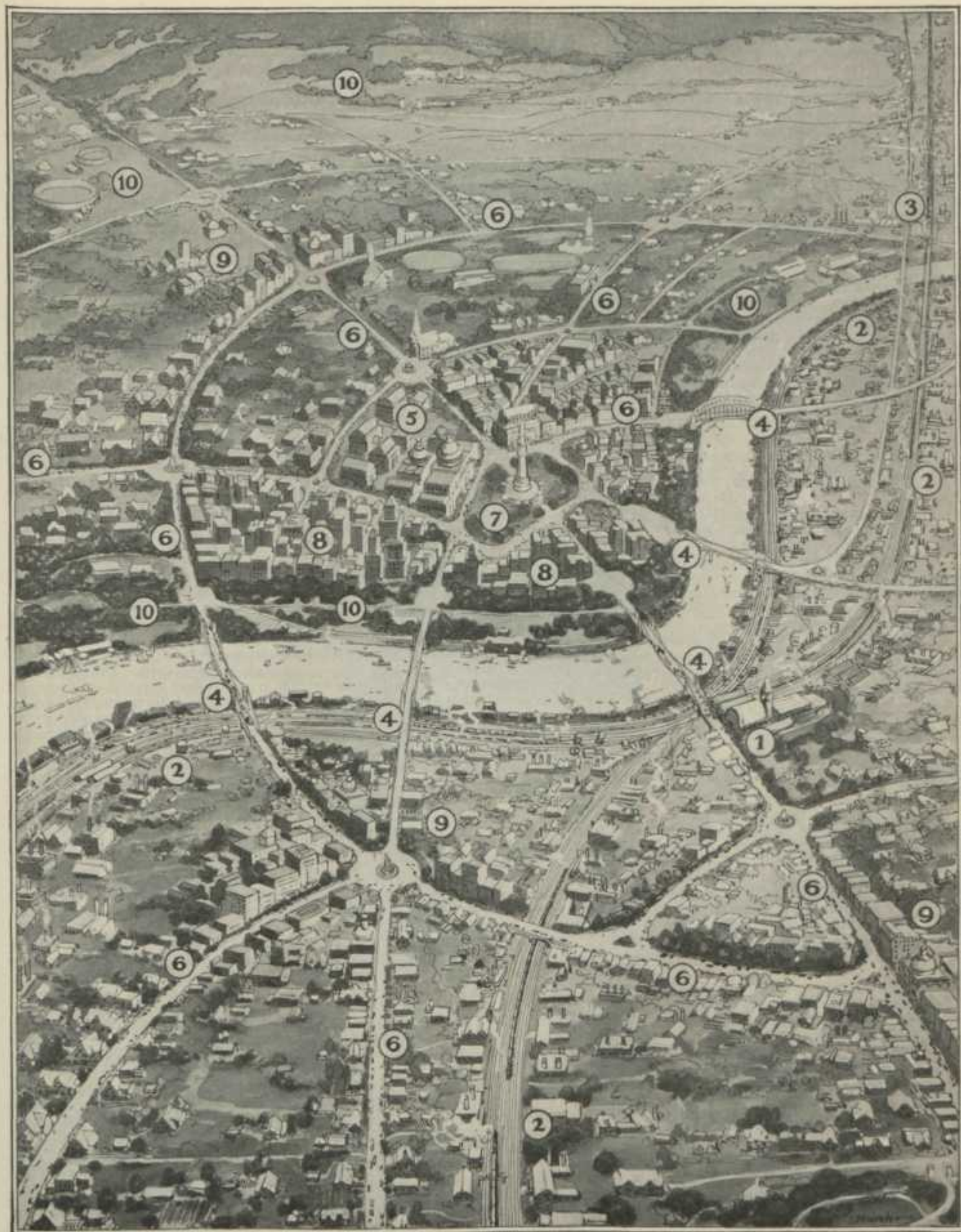
PEOPLE are still going about the country talking "city beautiful." There are still "city beautiful" committees even in chambers of commerce. There are still architects who spellbind an audience with eloquent advocacy of arcades on Main Street because there are good-looking arcades on the Rue de Rivoli. But in spite of this hang-over the emphasis is changed. Instead of the "city beautiful," what we are now thinking of is the "city useful."

Today we start with a proposition which, in the words of the old-time politician, cannot be successfully denied, that the reason for the existence of a town or city is business. Even a resort like Atlantic City is essentially a business proposition, though the raw materials of its chief industry are sand and salt water instead of cattle or iron ore. The problem is one of developing a given city so that it can make the most of its advantages. If this is granted, then the needs of business must be provided for, if the town or city is to continue existing, let alone if it is to grow.

So the first consideration in city planning is consideration for business. What block sizes will best provide for industrial plants, what for retail stores? What railroad facilities are required? How can they best be provided with the least interference to city growth—there are cities where lack of planning, which means foresight practically applied, has resulted in railroad rights-of-way being a constant and tremendously costly handicap to business movement? How wide should the streets be to provide for traffic?

Here is one of the places where zoning comes in as a business proposition by establishing a definite relation between the traffic capacity of the street and the use and bulk of abutting buildings.

Many cities, probably most of them, adopt zoning regulations on the basis of



SOME KEY POINTS OF INTEREST TO THE BUSINESS MAN IN A MODERN CITY PLANNED FOR UTILITY

1. Union passenger station (not a terminal)
2. Railroad lines and industrial areas along those lines
3. Suburban passenger station
4. Bridges across river and viaducts or underpasses across railroads
5. Public buildings
6. Main thoroughfares, radiating and circumferential
7. Civic center about which are grouped principal municipal buildings
8. Chief retail district
9. Outlying business districts containing neighborhoods' stores, branch post-offices, banks, etc. These are at intersections of main thoroughfares
10. Parks—so located that they serve the needs of people, but do not block main thoroughfares

what seems, superficially, to be an anti-business sentiment. They are seeking to protect their residence districts against invasion by sporadic business enterprises; a grocery store set down in the midst of homes, a filling station, a small factory seeking a cheap site to the injury of a whole neighborhood.

This is what has caused zoning to spread across the country in the amazing way it has during the past six years until today 27,000,000 people, more than half our urban population, live in zoned cities and towns. And our urban population is today more than half our total population.

But after zoning has been established, the business men begin to realize its business importance. If they took no part in securing it, if it was put over on them by other elements in the community—including business men thinking of themselves only as homeowners and forgetting for the moment that they are also business men—the zoning regulations may prove a handicap to business. For if these regulations were not consciously and definitely studied from the business point of view, they may check proper business expansion.

The Play of Business Judgment

ON THE other hand, if business men participated but did not study them from the business point of view and support them as a business proposition, these same business men may now be opposing them simply because they don't know enough about the matter to distinguish between a wise regulation which benefits them in the long run and a license which encourages them to injure each other and their community.

An illustration often repeated is where some one wishes to build a skyscraper. Others think the erection of a skyscraper is proof that the town had become a metropolis. Still others think only of the amount of money that the skyscraper will cost and the increase in land values. So they denounce the zoning regulation limiting building heights as a handicap to business enterprise. "Ten million dollars won't be spent because of zoning!"

This is a simple problem for the simple-minded. The answer is as easy as the answers in the old arithmetics for primary school pupils, against which great national organizations of business men are now waging war—"If a grocer buys a dozen eggs for 25 cents and sells them for 50 cents, what is his profit? Answer, 25 cents." The skyscraper problem is just as easy as that. "Do away with zoning and so encourage investment."

Unfortunately both answers are wrong because all the factors are not given in either problem. The grocer has several expenses, including rent, clerk hire, heating and lighting, advertising, taxes, which cut into his 25 cents of supposed profit. The tall building on one lot may keep neighboring lots under-developed for many years, or even permanently. It may create a traffic problem which will lead by well-recognized stages through street congestion followed by regulations and restriction to the construction of the most expensive means of transit yet devised, the subway. In its trail come crowded tenement houses.

There is an impression among those who live west of the Hudson River that the lower end of Manhattan Island is filled solid with skyscrapers. They do not know that within a few blocks of Broadway and Wall Street, on the way from the financial district to the ferries, there are buildings erected back in the 1870's and occupied by "what

you will." A recent investigation disclosed a store there occupied by a family of gypsies with a camel! They did not pay a high rent and when they were discovered the Health Department objected to them.

If one business man or one business corporation owned all of lower Manhattan, it is safe to say that it would have been developed differently. One building would not have shut off the light and air from adjacent buildings and so brought down their rental values. While protection of residence districts is probably the reason the majority of cities have adopted zoning regulations, it was this loss of rental values in its skyscraper office district that convinced New York.

When the old Equitable Building burned down several years ago, occupants of buildings on the surrounding streets were able to turn off their electric lights for the first time. It was a novel experience and so pleasant that the owners began raising a fund to purchase the square occupied by the Equitable in order to turn it into a park. This was one park project that was not based on "altruism." It was a matter of dollars and cents. Their offices facing on the fire-scarred ruins were worth more than when they faced on an overshadowing building. Report said they raised a considerable sum, rumor ran from one million dollars up. But it was not enough. The Equitable Company had visions of a super-skyscraper.

They made the vision true and the new Equitable Building is now one of the favorite texts for computations on traffic problems. Its population would fill all the subway trains for half an hour or more; that is they would if the occupants of nearby skyscrapers did not beat them to it. Because of that they straggle along for considerably more than half an hour. And because of that Mayor Walker has appointed a commission to find a way of making business in New York stagger its opening and its closing hours.

This Idea of Staggering

WHEN this commission has completed its labors, Mr. A. Business Man and all his clerks—who enjoy the privilege of living anywhere from one to two hours away from the office on express subway and suburban railroad lines—will be instructed to report at 8 o'clock so as to leave the transit lines clear for Mr. B. Business Man and his employees who are due to arrive at their place of employment at 8:15. At 9 o'clock Mr. A. Business Man, having read his mail and got set for a day's work, telephones Mr. G. Business Man only to learn that he has not yet been staggered in.

Our experience with the attempt to make men start work an hour earlier in the summer in order to get the benefit of the good, wholesome, and economical sunlight; which ended in our setting the clocks ahead so each of us could fool himself into believing that he was not getting up any earlier; indicates that the stagger plan may not be very easy to operate. But a good trick, like a good joke, is worth repeating. The New Yorker may set his clock two hours ahead so that the first staggerer can tell himself he is arriving at the same old 9 o'clock, and the last one can have the luxurious sensation of a bank president strolling into the office at 10:30. But luncheon time comes at 12:30 and two hours is a short morning if there is much work to be done.

When Mayor Walker's commission has the business day effectively staggered so that the streets of its town will be able to contain the building population fed out in relays, it may

take up the theater problem. At present most of the theaters maintain the fiction of a stated opening hour. This used to be 8 o'clock, then it receded to 8:15, then to 8:20.

Then some theaters went on to 8:30. Now one at least boldly proclaims that its curtain rises at nine. This is bold, not because it is a confession of rakish ways, but because it discourages the suburbanite who must catch a train home if he is to do any sleeping before office hours in the morning. Other theaters, less bold in their advertisements, often do raise their curtains just as late. And the reason is that the audience does not and cannot arrive any earlier. Stand outside and see the theater-goers slowly pushing their way along crowded sidewalks, note the long lines of taxicabs crawling for blocks away.

If time is money, New York certainly is a spendthrift. But like spendthrifts in general, it is generous. It gives freely to other cities an opportunity to study some of the factors needed by the business man in figuring whether a \$10,000,000 skyscraper will be an asset to his town.

The answer may not be the opposite of what it seemed when the problem was stated in the easy terms of the grocer and his supposed 25 cents' profit. The high office building has its advantages and it may be that the proposed skyscraper will prove an asset. But among the items to be reckoned in are light and air for neighboring buildings, street capacity, transit facilities, the cost of enlarging water and sewer services.

When that more complicated computation has been made, the answer will again involve zoning. The regulation may be reworded but regulation there will be, because experience has shown that no regulation leads to suffocation. There will be a limit imposed upon the bulk of buildings, perhaps taking the form of the setbacks which zoning forced upon New York, of which New York is now inordinately proud, and which make that sky-line of which we hear so much. There probably will be a limit imposed upon the size of any given skyscraper district because of the traffic and transit problems, the sewer and water expenses it will create, the living conditions it will impose.

Zoning Aims at Distribution

FOR WHILE zoning deals specifically with the height, area, and use of buildings, its fundamental purpose is to distribute population so that the population may be able to function effectively. That is a business proposition. One of the most important problems now before us, for we are beginning to realize that with all our labor-saving devices the greatest waste in American life today, is the waste of human energy. A subway express may carry us from the once green fields of the Bronx to Wall Street in three-quarters of an hour, but to that time must be added the time spent in getting to and from the subway express. And to that must be added the energy spent, the vitality lost on the trip. A half hour's walk to the office in a typical American city; fifteen minutes to an hour in one's own automobile, are good preludes to a day's work. Half an hour or more in a closely packed subway car is not.

The new emphasis on the "city useful" will give us more beautiful cities than we would ever have secured under our former "city beautiful" obsession. Then we were imitators: today we are becoming creators. Then we went abroad for models. Today we are beginning to clothe American life in new forms of beauty which express that life.

Lumber Finds Widening Markets

By FRANK G. WISNER

President of the National Lumber Manufacturers' Association

Decoration by Charles Dunn

SOMEONE is always telling us in the lumber industry how near at hand is the end of lumber. A month or two ago, Prof. Gerald Wendt, in an article in *NATION'S BUSINESS*, read its funeral oration.

And he isn't the first one. In 1879 Carl Schurz thought lumber manufacturing would be fading by 1900. As late as 1907 Gifford Pinchot gave lumbering twenty or twenty-five years at the outside. Yet in 1925 as much lumber was cut in the United States as the average for the great years of 1900 to 1910.

Now the lumbermen have no "irrepressible conflict" with the advocates of substitute materials for wood, but they naturally object to being railroaded out of business by them. They know that wood cannot be as freely used by 120,000,000 people as by 30,000,000 people with the sources of supply necessarily reduced. If there were nothing but lumber to build with, there would soon be no building.

Substitutes Help Lumber

THEIR experience in general with meritorious substitutes for wood is that they create unforeseen uses for wood; every new disuse seems to turn up a new use. They know that whereas substitutes for wood have been in the field both in housing and in manufacturing for centuries, the world continues to consume at some price all the lumber and other forms of wood that the mills produce. Human nature, with its likes and dislikes, depending more on feeling than on logic, more on experience and custom than on reason and political economy, cannot be persuaded at once to alter its ancient habits by a few laboratory demonstrations and snap judgments.

When sewed shoe soles came in it was reasonable to predict the disappearance of the shoe-peg, but millions of people, especially in Europe, prefer the pegged shoe, and a single factory in New Hampshire is still turning out the little birch pegs by the billion.

When the business and manufacturing sections of our cities began to turn to con-

crete construction, thus cutting off a great outlet for lumber, many lumbermen were apprehensive of bitter days; but it soon developed that concrete created a great new market for lumber for its forms and scaffolding.

When the automobile began to restrict the demand for buggies and wagons, there was more apprehension, but presently it was found that the automobile industry was requiring a billion and a half feet of lumber a year for the bodies of cars and sturdy boxes and crates in which to ship them.

Lumber Replacing Steel

RECENTLY there was a new alarm because of the advent of the all-steel body, but already the body manufacturers are turning back to wood, and the greatest of them all—the Fishers—has just bought 60,000 acres of timber land to insure future supplies for fifty years. Canny Henry Ford buys iron ore deposits—but also several hundred thousand acres of timber.

We have had such substitutes as brick ever since the tower of Babel and before, and yet seventy-five out of every hundred dwellings erected in the United States today are frame, and about 45 per cent of the material bill for the remaining 25 per cent is for lumber.

We have had metal for furniture since time immemorial, but the new Palmer House in Chicago, and the still newer and greater Stevens—the largest hotel in the world—have chosen wooden bedsteads instead of steel and brass. The latter, by the way, has found wooden window frame and sash preferable to steel, after all these years of the steel sash. Despite the zeal of its manufacturers, metal furniture has scarcely made a dent in furniture production.

The old plank road of the fathers has gone, but nobody has found a suitable substitute for 80,000,000 wooden cross-ties a year for the railways that have superseded them and use a thousand feet of wood for every foot that went into plank roads. The

As one lumber market passes out of the picture, a new one appears, often more satisfying than the last



rail traffic of the nation is vastly more dependent upon wood than the pioneer roads were on plank. We would still have board walks if our feet could decide, and when we want a foot-ease stroll we go to Atlantic City and pace the board walk.

Nothing yet discovered is a really good general substitute for wooden floors. After years of experimentation with various substitutes for wooden top-flooring, big new office and factory buildings are returning to wood.

With universal refrigeration has come a new universal use for wood.

Steel ships have mostly replaced wooden ships, but it takes lumber to make them livable and the surfaces of decks are of wood. The wooden masts have gone, but the great booms and spars of the loading gear are mostly wood, and, still most of the world's piers and wharves are wholly wood, or rest on wooden piling.

There was no substitute for walnut when Napoleon paid \$3,000 a ton for that wood for musket stocks which wouldn't break when muskets were used as clubs, and there was none when the rifle factories were turning out millions of rifles a year in the World War.

Wood Has Advantages

RAYON (itself wood) substitutes for silk, but rayon and all other textiles depend on little pieces of persimmon and boxwood—shuttles and bobbins and no substitute in sight.

Wood is both light and strong, tough, resilient and elastic. It can be worked and fabricated with small tools, easily portable and used on the job. It can be shaped by lathes and pressed into manifold forms with startling rapidity. Weight for weight it is as strong as steel and much stronger than cast iron. It burns, but heat does not distort it, and it is rustless.

Wood is a natural heat, sound, and electricity insulator, which is doubtless one of the reasons of the instinctive liking of American people for as much wood as possible in their dwellings. The well-built frame-house is a conservator of heat and reducer of fuel bills. It is the architect's delight because lumber is so adaptable, so varied in form, and its structures so alterable; and so suited to color schemes, because it takes to paint like a duck to water.

Wooden walls do not hold moisture and make tombs of houses for living men. The best insulators to make up for the absence of wood in masonry houses are themselves manufactured from wood fibre.

The human hand loves the feel and delights in the grip of wood. Scarcely a working tool is known that does not have the handles of wood or cased in wood. None of the synthetic materials rival it in this respect. None of the new ones have its strength and adaptability. None of them have its resiliency, and few its durability. After years of trial, nothing has been found equal to the artillery wheel for automobiles, and the army is turning back from the steel wheel to the wooden wheel for its field guns. Wood still holds the fort for the most part in railway freight cars, and on the score of comfort and elegance would still be the favored material of passenger coaches.

The newest great industry—radio manufacture—has found no new synthetic to dress it up. Radio cabinets and shipping boxes demand hard and soft lumber in enormous quantities. Had it not been forthcoming the radio industry would have limped into glory

instead of carrying it by assault. Radio has opened such a market for lumber that there have been times within the last two years when the lumber used in radio cabinets in certain territories was more than went into house-building.

No miracle of the laboratory yet promises to supersede locust wood for telephone and telegraph insulator pins, juniper and cedar for pencils, basswood and ash for butter and organic oil containers, persimmon and dogwood for shuttles and bobbins, hickory and ash for axe-helves, hubs, wheels, etc., pine for casting patterns, birch for toothpicks, poplar for clothes pins, cedar for chests, cypress for laundry appliances, dogwood for golf-club heads and pulleys, and hundreds of other specialized industrial uses for different species of wood.

So protean is the suitability of wood for human uses that despite all the synthetic materials the variety of its uses is increasing. Ten years ago but 2,000 uses of wood could be enumerated; a census now in progress has discovered 4,500.

The prophets and advocates of a synthetic or non-lumber future, house and tool, wall and furniture, talk vaguely of economy. Are all these new plastics or resinoids that we hear so much talk about to be manufactured without cost and transported and applied without labor? Can they compete with wood in final cost? Can the factory make them, for all purposes, as cheaply as 470,000,000 acres of land, most of which cannot now, and probably not for a long time, be used better than in the growing of trees? Can costly electric power, controlled chemistry and the deteriorating machine compete with the eternal chemistry of the free sun and the perpetual miracle of the tireless green leaf?

Where Wood Is Essential

THE PROPOSAL to replace wood by a combination of phenol and formaldehyde has the sound of simplicity itself, especially as we are assured that "it is superior to wood in every respect." Automobile frames, for instance, where the resiliency and sound insulation of wood make it supreme today! Imagine Babe Ruth swatting a home run with a baseball bat made of formaldehyde and phenol! This is quite a market in itself; bats and other sporting goods use up about 30,000,000 feet of lumber annually. Of course, substitutes will easily and cheaply give us yearly a million telegraph and telephone poles, billions of cross-arms and insulator pins and a billion fence posts.

Doubtless the resinoids and composites will serve admirably for airplane fuselages and propellers; patterns and flasks for iron and other castings, themselves requiring a small forest every year; shoe pegs and other shoe findings; tanks, silos and rollers, trunks and valises; miscellaneous handles, taking a big forest yearly; agricultural implements, 300,000,000 feet; boat building 200,000,000; woodenware, twice as much; fixtures, interior trim, sash, doors, blinds, moldings and planing mill products in general; brooms, firearms, dowels, picture frames, coffins, musical instruments (nothing but wood for sounding boards); pulleys, pumps, sewing machines, shuttles, spools and bobbins; signs, tobacco boxes, packing boxes and crates, chairs and other furniture, machines, and so on through the 4,500 uses of wood.

Every manufacturing industry in the world depends to some extent upon wood. Truly the resinoids will start something when they undertake to substitute for them.

Let it not be forgotten that synthesis and composition do not work in a vacuum and with nothing. The exhaustion of coal, the prolific source of synthesis, is already in sight in Europe. American anthracite has a relatively brief span of duration. Even our soft coal and building sands have certain, though distant, limits. Brick clay deposits are being worked out every year. Cement clays are not everywhere. We are assured at this moment of only six years' supply of petroleum in the United States, forty years of copper and twenty to thirty years of the best iron ore.

The whirlpool of industrial and commercial change may yet deflect an enormous volume of demand to lumber; the world may eagerly return to the material that can be produced forever without exhaustion, a material that is simply a usable physical form of elements that eventually return to their disunited condition. Eternally producible wood, instead of being the target of substitution, may become the universal substitute to piece out the dwindling supplies of non-replaceable inorganic materials.

By-Products of Lumber

BUT THE synthesists tell us that wood is already too dear, no matter what its qualities, to be used in its natural composition, subject to no change but drying and shaping, i.e., to say, in general, lumber. They eliminate lumber but they demand trees for fibre, distillates, and cellulose. They must have them for material for synthesis. Here is where they get ahead of themselves. There is too much ready made wood in the world.

The physical waste in producing lumber, and quantities of low-grade or cull lumber for which no profitable market has been found, is enough to make annually all the pulp and paper the United States will consume for twenty-five years to come. Low-grade lumber is too cheap to pay for taking defective or inferior logs out of the forest. Chemical utilization of cellulose is usually economically possible only because of the material available as an incident of lumber manufacture. In some forests 5,000 to 15,000 board-feet of potential lumber or cellulose are left to rot on the ground. Lumbermen are praying for the wonder workers of chemistry to show them some profitable use for this material.

And yet, already, we have instances of secondary materials, made from wood and in great vogue, that are sometimes costlier and frequently poorer than nature's unchanged product. High pressure salesmanship is introducing inferior material while the better material rots in the forest.

Changes Are Slow

IT IS a serious mistake to make people believe that the universal displacement of wood is just a matter of time. Such fundamental changes do not take place suddenly. There are 20,000,000 automobiles in the United States, with the power of 300,000,000 horses; but the number of horses and mules has fallen only 5,000,000 since 1910. Suppose some eloquent prophet had persuaded people to stop breeding horses and mules in 1900! Even now, despite farm tractors and trucks by the millions, our wagon factories are still providing the farmers with about half as many wagons as ever—mostly wood.

Wood in its natural condition will never be entirely displaced until men have learned how artificially to make wood, or something with its prized and loved qualities and at-



*"You know it when you see it.
But it's hard to define."*

"What is?"

"Personality."

A cheap price is something definite
which a bid can be based upon.

But you can't get a bid on putting

personality into your business station-
ery. It just has to be done through
typography, or color, or illustration
—plus paper. Plus paper good
enough to be really representative of
your business and its standing. Letter
paper is bought by the thousand
sheets. But letters are mailed one by
one. Each letter is like a tub. It must
stand on its own bottom.



The next time you need stationery, checks, invoices, or statement forms, ask for estimates and sample sheets of Cranes Bond No. 29—a fine all new white rag bond paper which is used by the largest business financial institutions and industrial companies.

CRANE & COMPANY, INC. DALTON, MASSACHUSETTS

When writing to CRANE & COMPANY, INC., please mention Nation's Business

tributes. Not even the tiniest step has been taken in that direction. In the meantime, substitutes of a different nature, some better and some inferior for their purposes, necessarily will gradually come in, as population increases and the relative timber supply decreases, but we shall have pressing uses for all the lumber and other adaptations of wood that agriculture will leave to nature's myriad ceaseless wood factories. And the by-products of the shaping of wood for utilization will be sufficient to take care of all the legitimate demands on cellulose for decades to come.

The owners of the \$10,000,000,000 of interested capital, and the 1,200,000 persons engaged in the lumber industries and the 60,000,000 people that live in frame houses need not despair of their capital, their jobs and their home values. On the whole, the substitutes, including formidable steel it-

self, will in the long run displace lumber only as fast as the supply of lumber is inadequate to the preferential demand upon it. It will be a slow evolution or devolution, if you will, and one that may have some sharp turns. Even while Professor Wendt was predicting the ousting of lumber by steel for walls and frames of houses another scientist was writing that even for huge buildings alloys will take the place of steel. Still another was urging the economical substitution of aluminum for steel in engines and cars.

Rot and Fire Enemies of Wood

ROT and fire are the chief enemies of wood. Preservative chemical processes have already multiplied the lives of ties, posts and poles by three or more. Incombustible paints and impregnations have made a start in opposition to fire, but a great field is

here. This is something the chemists can do today, now. To make wood slow-burning and eliminate the fire-hazard will confer a social service of universal benefit.

Economies in the manufacture and utilization of lumber may long defer the necessary advent of substitutes. The log can be made to yield more lumber, more logs may come out of the forests, and the lumber may be made to go further and last longer on the building job and in the factory. The growing use of veneers and plywood may be fruitful of great economies. In plywood, even newer than the resinoids, we have a sort of improved lumber—a lumber that, while retaining the admirable natural characteristics of wood, gives better service for many purposes than solid wood.

Economies and manufacturing changes may do more to make wood persist than synthesis can do to oust it.

What Should Fact-Finding Cost?

By WILLIAM J. REILLY

Sales Research Department, The Procter & Gamble Company

IT would be fine to have the facts, but it costs too much to get them" is the frame of mind of many advertising and sales executives who admit the value of facts in making decisions, but who keep on following hunches in the old-fashioned way.

No wonder many executives have this notion. They have paid the bill while researchers have blundered into nation-wide studies that cost plenty and meant little.

But just how much should it cost to get the facts?

A few examples of our own experience, together with observations of the experience of other information-gathering organizations, show that where improved methods are used, fact-gathering has lately become a much less expensive job.

Ten years ago, or even three years ago, when an organization set out to make a market study, it usually turned loose a large number of investigators who interviewed several thousand housewives or dealers scattered all over the country, took a grand average of all the answers given, hoped that somehow mistakes would balance one another and the results would be purified from error, wrote a four-volume report explaining the whole thing, and turned in a bill that would worry any executive.

Quality Comes, Quantity Goes

BUT if you pick up a report of a more recent investigation, the first thing that strikes you is its brevity. The old four-or-five-volume report has shrunk to just a few pages of reading matter and one or two tables. And closer examination shows that, although the quantity has decreased, the quality has increased and that greater accuracy at a reduced cost has come from at least five kinds of improvements.

1. Instead of several hundred amateur interviewers, we find that recent investigations employ only one or two expert observers.

2. Instead of thousands of interviews, a few "key" interviews in carefully selected and strategic locations are secured.

3. More thoughtful planning precedes the selection of locations for study.

4. More attention is now given to the technique of conducting an interview.

5. Instead of carrying all studies out to a uniform degree of accuracy, each investigation is carried only to that degree of precision necessary to permit executive decision on the problem at hand.

In the first place, men in the business of getting information have learned that getting accurate facts is not a part-time task for an amateur, but a job that requires careful training. When a trained observer goes out to discover why a certain market condition exists, he has an infinitely better chance of drawing out the real reason than one untrained in getting information. The imposing array of mental instincts and tendencies that stand in the way of scientific workmanship could, in itself, well be made the subject of a long discourse, to say nothing of common violations of interview technique.

But it is readily acceptable that only an expert in getting facts is able to protect his work against errors that come from preconceived notions, leading questions, wrong order of questions, use of abnormal subjects, taking of notes at the wrong time, and a host of other natural mistakes far too numerous to mention.

In the second place, it has been found much better to interview one experienced leader in an industry than it is to average the answers of a thousand who are half informed. Even in the case where it is necessary to interview consumers, it has been found that comparatively few, well chosen, afford a better and more accurate picture than thousands of consumers who may be so different as to make their testimony not comparable.

Citing a Personal Case

OF COURSE, we know more about our own studies than those of others, so if personal cases will be allowed, the following may be of interest. In connection with one of our early studies we interviewed over five hundred housewives. In a later study we found that with a little more attention to the choice of "key" housewives we could get the very same information from forty interviews.

Again, in a study of one of our soap products, we interviewed one hundred housewives

in one location. After correlating this information with that secured from dealers in trial cases, we found that we could get the same information from two dealer interviews.

In a more extensive study covering the entire country east of Kansas, we found that instead of securing a full quota of interviews in each location selected, it would be necessary only to conduct enough interviews in each to determine that the location did not differ appreciably from the central location chosen.

Results from Single Source

IN A study of dealer attitude, we first interviewed a sample of dealers in four different cities, but later found by comparing information that we could get the very same information from one "key" dealer who knew.

Third, until very recently market studies were commonly carried with little forethought into a large number of locations with the result that data from widely different kinds of places were all thrown together and considered to be homogeneous. The composite picture that resulted, usually distorted by component abnormalities, represented a theoretical average situation, the like of which actually existed nowhere. The work was inaccurate as well as expensive. Now it has been found that a very few carefully selected and purely typical locations better serve the purpose.

A hundred examples of cutting costs and increasing the accuracy in getting information could be given. But the most striking evidence for any reader can be secured by paying a little visit to any one of the recognized organizations that collect market information. One simple observation of the size of the later reports will convince that the quantity of study is being greatly reduced, but an examination of method will be equally convincing that the quality is improving. Such an observation will at the same time dispel any fear that facts are too expensive to get.

In short, the business of gathering facts has been taken out of the expensive luxury class and put into the budget of economic necessities.



THE PRESIDENT
A Big Six Custom Sedan (for 1926)
\$2245 f. o. b. factory

No-draft ventilating windshield, exclusively Studebaker; nickel-plated front and rear bumpers; Watson stabilizers; engine thermometer and gasoline gauge on the dash; coincidental lock; oil filter and air purifier; automatic windshield cleaner; double rear-vision mirror; vanity case; smoking set; clock; arm rests; toggle grips; dome light, automatically turned on when right rear door is opened; traffic signal light; four-wheel brakes; full-size balloon tires; and two-beam nickel-plated acorn headlights, controlled from steering wheel.

A Custom Car for Captains of Commerce

THE PRESIDENT is the first custom car ever exclusively created for the American business executive and christened in his honor.

It is not alone the finest Big Six Sedan that Studebaker has ever built, but one of the world's finest cars irrespective of price!

Its low-swung custom body is lacquered in ebony with a belt of thistle green and a stripe of Siskiyou yellow, or in Croton green lacquer with an ebony belt delicately striped in ivory. Luxuriously upholstered in broadcloth or Chase mohair with broad-lace trim—its equipment includes disc wheels, four-wheel brakes and a ventilating system (exclusively Studebaker) which

insures fresh air without drafts or moisture.

The President is powered with the same Big Six engine that recently crossed the continent in 86 hours and 20 minutes—thereby smashing all previous transcontinental automobile records by 16 hours and 25 minutes. This quiet Studebaker L-head motor has long been noted for its smooth flow of power and freedom from vibration—which can only be insured by Studebaker's big crankshaft, fully machined and dynamically balanced.

We want you to see this latest and greatest example of Studebaker's One-Profit facilities. Will you call on The President or shall The President call on you?

STUDEBAKER



Publishers Name Their Own Court

By CHESTER LEASURE

BUSINESS must govern itself, must set up its own standards of right and justice, and must live up to them.

A fine ideal! But is it any more than an ideal? Can it be put into effect? Or will self-government by business always be nothing more than a high-sounding phrase—an expression of what ought to be, not of what is?

The answer is that business can and does. Not everywhere, and not always, but increasingly. If you ask an example, here's one: The Audit Bureau of Circulations, founded by publishers, advertisers and advertising agents to set standards of circulation and provide a means of securing open and honest figures of circulation based on those standards.

It's no small task that the Bureau carries on. It has nearly 2,000 members in this country and Canada, of whom some four-fifths are publishers; it spends about \$400,000 a year and has perhaps a hundred employees.

A good-sized sum to put in force rulings made by business itself for its own good and to insure fair play. But it is interesting to speculate on how far 100 employees and \$400,000 would go if the Government should take over the job of defining what is circulation, and of auditing circulation figures. But, someone says, if the Government did it, it would do the job with authority.

The A. B. C. Has Power

SO DOES the Audit Bureau! It has authority and power to punish, and it doesn't hesitate to use that power. A meeting of the Board of Directors of the A. B. C. is no droning gathering of bored business men whose chief task is the adoption of a couple of "Whereas'es" and a few "Be It Resolved's."

They are often the scenes of red-hot fights between publishers as to methods, of bitter attacks on the Bureau by publishers whose circulation methods are under fire.

Publishers who have been caught redhanded in violations of the Bu-

reau's rules have blustered, have sent lawyers to threaten suit for untold millions of dollars if the Bureau expelled or suspended them, and then have climbed humbly down and taken their medicine.

In one dramatic case a publisher who had at first been prepared to fight learned to his own surprise that a crooked circulation manager, urged on by a desire to win a bonus, had been faking circulation by dumping bundles of papers. Then the publisher changed his tune and begged for a minimum punishment.

Majority Does Not Control

I HAVE said that four-fifths of the Bureau's membership is made up of publishers. The other one-fifth is about equally divided between advertising agents and advertisers. Yet a striking thing about the organization of the Bureau is the make-up of its Board of Directors. The publishers, giving chief support in numbers and money, have voluntarily surrendered control of the Board to the other two classes of members.

There are 21 members of the Board of

Directors, of whom 11 are advertisers, 2 are advertising agents, and only 8 are publishers—two from magazines, two from newspapers, two from business papers and two from farm papers.

This provision is a wise one, from the publishers' standpoint as well as from that of the advertiser. If publishers were in the majority, it might be charged with considerable truth that the publishers were auditing themselves, and confidence in the Bureau would be immediately impaired.

What, then, does the Bureau do?

Primarily two things.

It defines circulation.

It audits figures of circulation which has been gained according to those definitions.

One thing it doesn't do. It doesn't pass opinion on the quality of that circulation, but only on the methods by which it is gained and the quantity. It doesn't pass any opinion as to what is "good" circulation or what is "bad" circulation. It leaves to the advertiser to judge, upon the basis of the facts as set forth in the Audit Bureau reports, what circulation is good for his purpose and which he will decline to buy.

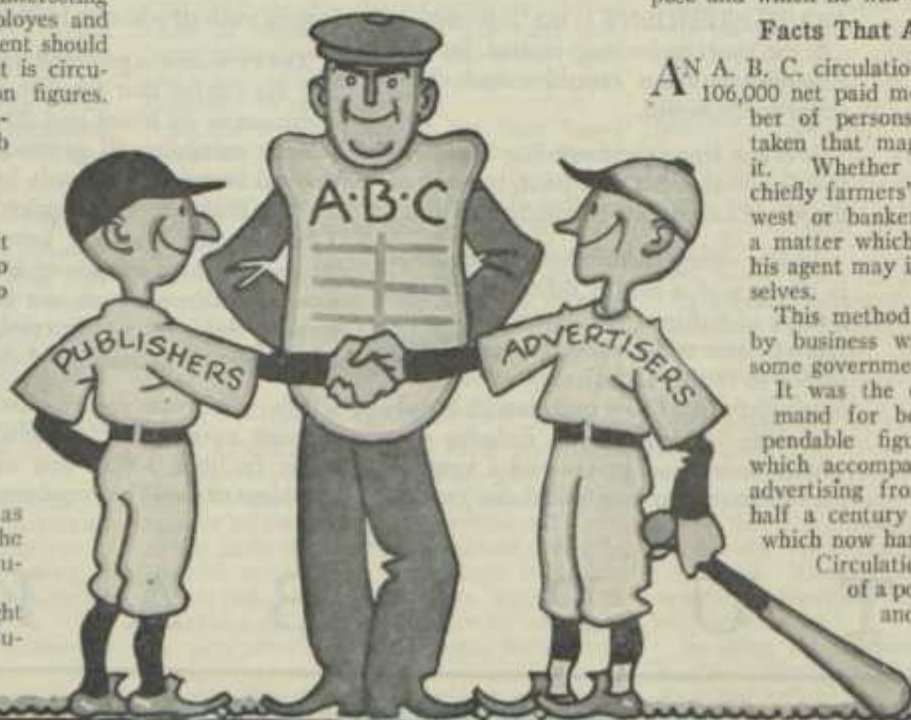
Facts That Are Facts

AN A. B. C. circulation for a magazine of 106,000 net paid means that that number of persons has in good faith taken that magazine and paid for it. Whether that 106,000 be chiefly farmers' wives in the middle west or bankers in large cities is a matter which the advertiser and his agent may investigate for themselves.

This method of self-government by business was not achieved as some governments, by a revolution.

It was the outgrowth of a demand for better and more dependable figures of circulation which accompanied the growth of advertising from little or nothing half a century ago to an industry which now handles billions a year.

Circulation is the life-blood of a periodical. Magazine and newspaper advertising are an essential, an indis-



The Amazing Growth of Metered Mail in Four Years

NEARLY a billion pieces of Metered Mail passed through the United States Post-offices during the Post-office Department's fiscal year ending June 30, 1926. More than 97% of this Metered Mail was imprinted by the thousands of Pitney-Bowes Postage Meters now in use under Government supervision. It is estimated that for the fiscal year ending June 30, 1926, more than 7% of all the U. S. Post-office revenues from postage on letter mail handled, were collected through Postage Meters from users of the METERED MAIL system.

Thousands of business leaders in every field have adopted Metered Mail. This system is available to any responsible mailer who is seeking improvements in the handling and dispatch of his mail.

Check for yourself who uses Metered Mail and its advantages—the coupon below brings complete information.

The Postage Meter Company

708 Pacific Street, Stamford, Conn., U.S.A.

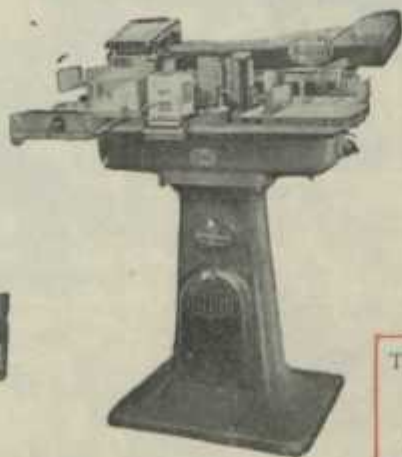
SOLE DISTRIBUTORS OF

PITNEY-BOWES MAILING EQUIPMENT

Offices in principal American cities and foreign countries

Two models of Pitney-Bowes Mailing Machines showing the Postage Meter in position.

This equipment automatically feeds, separates, seals, imprints indicia in lieu of stamps, and stacks mail—all in one operation.



1922—203,580,000 imprints



1923—470,808,000 imprints



1924—726,336,000 imprints



1925—917,280,000 imprints

The Postage Meter Company,
708 Pacific Street
Stamford, Conn.

Please send information regarding the advantages of Metered Mail and its use in business similar to ours.

Name _____
Company _____
Address _____

pensable factor in modern distribution. It is easy to find fault with them, it is easy to say that they are wasteful, but it is not possible to deny that they are an effective method of selling goods and a method that is here to stay.

And the first question the advertiser wants answered by a publisher is: "What is your circulation?"

Stimulants to Circulation

DEFINING circulation is not as easy as it sounds. A magazine is published by a large fraternal order and sent to each of its members who pays his dues. Is that the same as subscriber circulation?

A newspaper announces that it will pay a large reward to the holder of a particular copy, and its circulation jumps almost momentarily. Is that good circulation, defined by the A. B. C. as "net paid"?

Two magazines, each of which has an annual subscription figure of \$5, announce that a subscriber may have both for \$6. Is the subscription gained in this way to be classed as net paid for both?

What about the hundred and one other ways of stimulating circulation? How decide what may and what may not legitimately be called net paid?

These questions have been answered by the A. B. C. until it has built up a definition of circulation accepted by all classes of its members, advertisers, advertising agencies and publishers.

In brief outline this is the way in which it functions: Twice a year each publisher member makes a statement of his circulation. His may be a magazine proudly showing a circulation of two million or more, or a newspaper with a circulation of 1,500; but the general principle is the same. A blank is filled out and sworn to, showing how he gets his circulation and where it goes. If he makes premium offers, if he joins with other

publishers in club rates, he must set forth the facts. Magazines must divide their circulation by states and tell what percentage goes to large and what to small communities. Newspapers must set forth what part is city, what suburban and what in the country at large.

Once a year the Bureau makes its own audit as a verification of the publisher's statements. No publisher can become a member until he has satisfied the Bureau that he keeps his records in such form that they can be properly audited.

Suppose the figures of the publisher's statement and the figures of the Bureau's audit do not agree—what does the publisher do?

Of course, he can get mad and quit, provided he gives sufficient notice and has paid his dues, and an audit has been made of any of his own statements which the Bureau has sent out.

Or, he can ask for a re-audit on what might be termed a sound sporting proposition, the publisher to pay the expense if he's wrong and the Bureau to pay if he's right.

Questions of methods of getting circulation may be thrashed out before the annual meeting or may come up before the Board of Directors with its power of suspension or expulsion. So much for the methods and purposes of the Bureau.

There are two other things that make it an interesting example of cooperation and self-government by an industry. Publishers' dues, which constitute a very large part of the Bureau's income, vary with circulation, so that the magazine with a quarter of a million pays ten times as much as the magazine with 5,000. But it doesn't cost ten times as much to make the audit of the bigger fellow. So the little chap in the publishing field is able to get the benefits of the A. B. C. at the expense, in part, of his bigger and more prosperous brothers.

Another thing: The Bureau in its definition is stricter than the Government. Uncle Sam permits a subscriber who has not paid for any period up to a year to be classed as one of the "net paid." The Bureau fixed the limit at six months.

The availability of circulation figures for nearly all the leading publications of this country and for very many of the small class magazines and the small city newspapers is in striking contrast to a time not many years ago when circulation might mean almost anything a publisher wanted to say.

Sliding Circulation Values

NOT LONG ago a speaker at an advertising gathering in Great Britain said that a publisher in that country might put his circulation at 100,000 and mean any one of seven things.

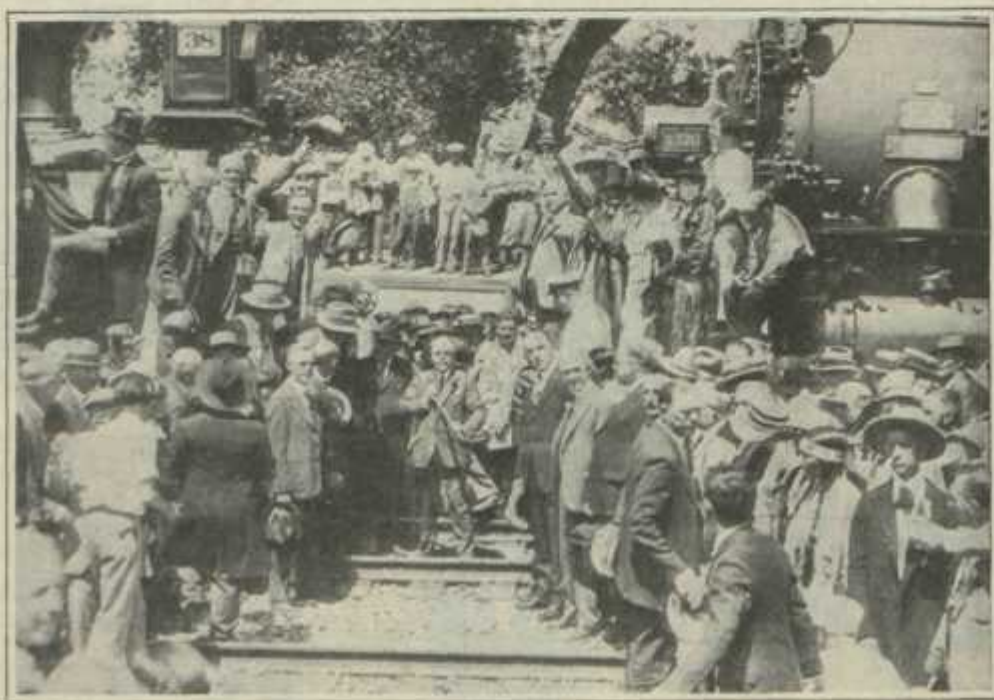
Here, as a curiosity, are the seven:

1. That 100,000 is the approximate average number of copies distributed—paid and unpaid.
2. Or, that 100,000 represents the circulation (number of copies distributed) of a single issue (perhaps the largest recently published).
3. Or, the number he intends to distribute during the next six months.
4. Or, total number of copies, not average per issue, during a certain period.
5. Or, that he printed an average of 100,000 copies, any proportion of which reached paid subscribers.
6. Or, that he actually printed and distributed an average of only 20,000 copies per issue and estimates that each copy is read by five persons, making a total of 100,000 readers?
7. Or, that an average of 100,000 copies per issue reached 100,000 different individuals who had paid, either the single copy price or the established subscription price, or a special price—or nothing at all.

The Golden Wedding of the Rails

THE fiftieth anniversary of Los Angeles' rail connection with the outside world was celebrated recently at Lang, forty miles to the northward of Los Angeles, where the rails first met in '76. A golden spike was driven, in memory of the union, by William H. Crocker, son of the railroad builder.

Half a century ago, all communication to and from Los Angeles was through San Francisco. With the completion of the more direct connecting link, the development of the former city went ahead at a much greater pace



Driving the golden spike at Lang, Calif., to celebrate the rail connection of fifty years ago, which gave Los Angeles direct connection with the outside world. William H. Crocker, son of the railroad builder, is holding the sledge hammer. The engine on the left was the first to run over new route in 1876.

to become a healthy rival of San Francisco.

The first train to go out of Los Angeles over the then new route was met at Lang by a modern de luxe train of the Southern Pacific System.

Notables from San Francisco, including Mayor Rolph, rode to Lang on the modern train, while Mayor Cryer and the official party from Los Angeles traveled on the original train that was used a half century ago.

To lend a touch of verisimilitude, original costumes of the period were worn by the members of both of the official parties.

WIRE WORLD PHOTO

NOW A NEW

Burroughs

Automatic Bookkeeping Machine



THE DUPLIX SUBTRACTOR

*Many Styles and Sizes
for Various
Applications*

Date		To Cash		By		Total	
1926		1927		1928		1929	
12184	14659	21429	9235	11671	6751	10870	9580
001	1629	3720	938	2140	10451	14659	2950
29139							

This feature makes it possible for this machine to do work that formerly required two or more operations. Figures automatically accumulated or stored in the extra set of adding wheels can be subtotaled or totaled by the operation of this lever.

This Total Accumulates Automatically

The Duplex-Subtractor automatically accumulates the totals. The Accounts Receivable application is shown. Similar advantages may be obtained in Accounts Payable, Stock Records, Payrolls, Distribution, etc., with accumulations of charges, credits, or balances as posted in the column desired.

Requires Fewer Operations!

Prior to any public announcement, several million dollars worth of these machines have been sold and installed. They have already been tried and proved. In the opinion of business men, the Duplex-Subtractor has more than justified all that we claim for it. The savings in time and the greater accuracy

effected on many different types of work are remarkable.

But only a thorough demonstration can give you a true picture of this machine's value to you on your own work. The nearest Burroughs man is ready, at your convenience, to give you a showing. Or write us direct for full information.

BURROUGHS ADDING MACHINE COMPANY
DETROIT, MICHIGAN

Burroughs Adding Machine of Canada, Limited, Windsor, Ontario
Sales and Service Offices in all the Principal Cities of the World

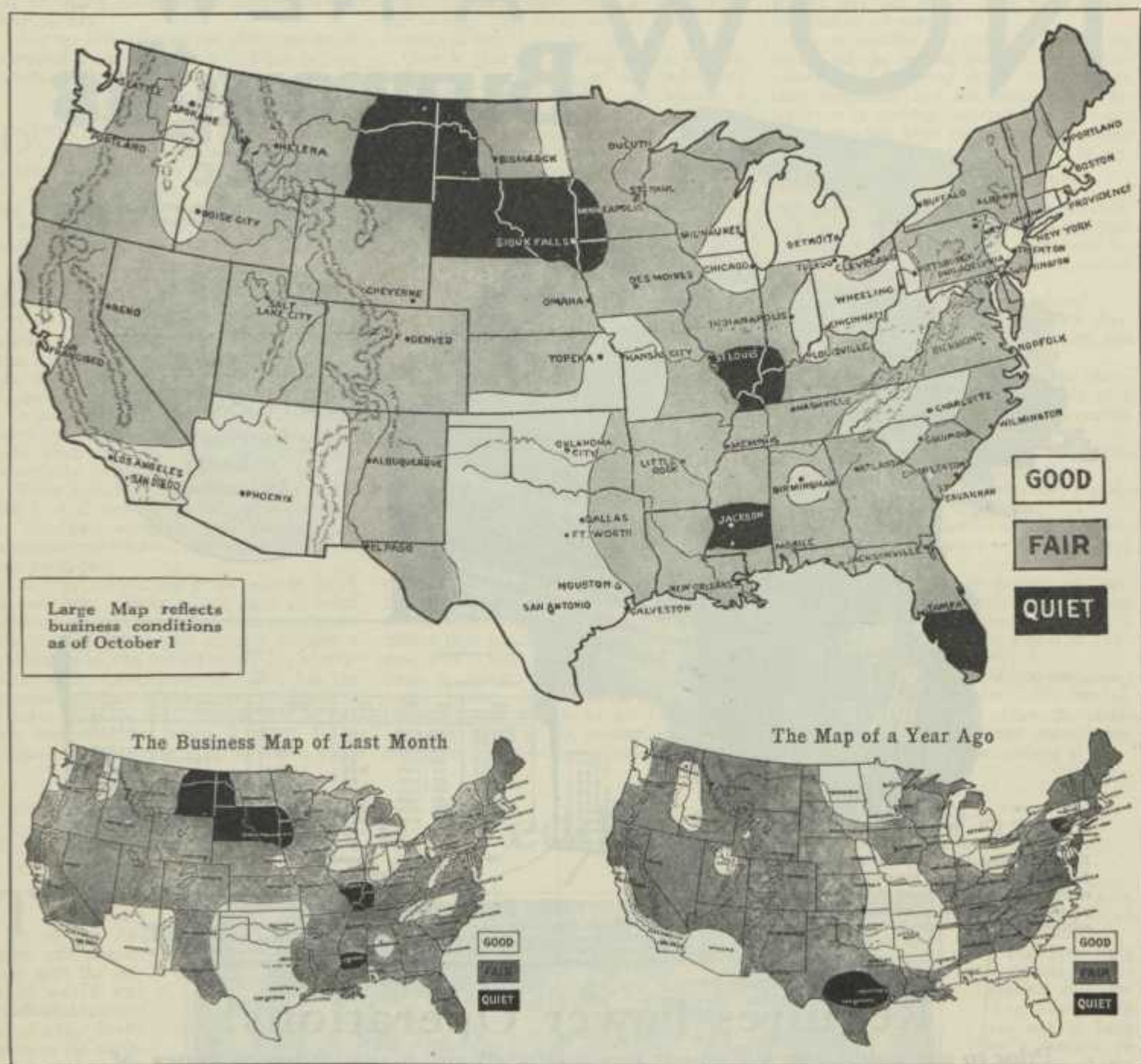
Burroughs Adding Machine Co.,
6535 Second Boulevard,
Detroit, Michigan

I would like to have full information about your new automatic bookkeeping machine, the Duplex-Subtractor as applied to my particular business.

Name _____
Business _____
City _____ State _____

BACKED BY BURROUGHS SERVICE

The Map of the Nation's Business



By **FRANK GREENE**

Managing Editor, Bradstreet's

WHILE the happenings in trade and industry in September and early October were mainly favorable, special emphasis might be laid upon the notable pick-up in wholesale and retail trade, the increased pace in most industries and the strength shown in prices, the index numbers for which advanced for the second month following eight successive declines.

Additionally favorable happenings were the enlargement in pig iron production in September to a point not equalled for that month since 1918, the prediction of a gain in unfilled orders on steel mill books, the maintenance of automobile production at

a high point despite the dropping behind of some large factories, continuance of the really large export trade in coal, mainly as a result of the British strike, and the setting up of new high records in car loadings, which brought the weekly average for the year well above 1,000,000.

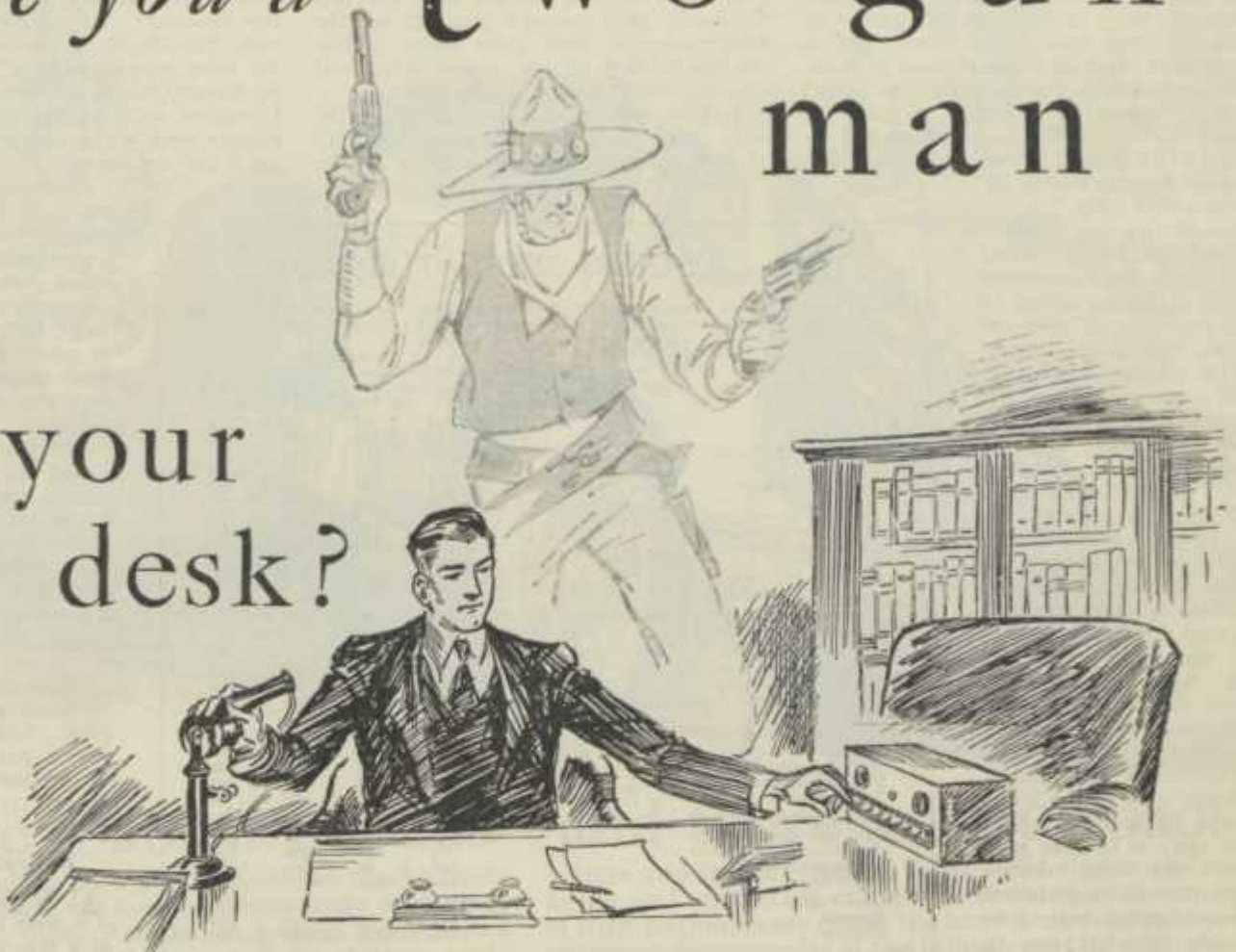
The big unfavorable feature of the period under review was the break in raw cotton of nearly 5 cents in September which, added to in early October, brought the quotation for the basic grade nearly 10 cents below the price ruling a year ago; the great Florida coast storm which devastated several cities and towns in southern Florida with resulting loss of life and property and—this a com-

paratively rare occurrence—a wet harvest in a large part of the northern grain belt, but especially in Iowa and Illinois and parts of adjoining states which made certain a good deal of damage to the grade of the grain and made for a big quantity of soft corn.

Other happenings, some of these negatively unfavorable, in the implications conveyed were the further churning up of the stock market—this followed by a downward reaction in early October—and the strengthening of money rates leading to the expectation that a rise in rediscount rates was possibly foreshadowed.

Crop developments were varied with results that seemed to throw doubts upon the

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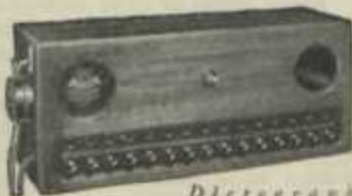
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question as to just what is an ultimately favorable crop return. For instance, rains in mid-September in the north central states with killing frosts in parts of Iowa, Illinois and Minnesota later and snow in Canada while damaging to quantity and quality of corn, potatoes and spring wheat had a stimulating effect on prices of these products whereas favorable weather for cotton caused a sharp upturn in estimates of yield to 16,627,000 bales with a resulting fall in prices which seemed to rob producers of any possible benefits due to enlargement of yield.

Speculative markets seemed to follow rather than lead the downward trend in cotton owing to the pressure of sales of actual cotton at interior points all the way down. This country selling became so panicky that plans were discussed first in Texas and later in other states to lend upon, store, and thus take off the market, large quantities of cotton.

The break in the raw material in turn unsettled the market for cotton goods for distant delivery and thus whatever favorable effects followed the first weakness in the staple were vitiated by the general indisposition to deal pending a clearer view of the limits of the decline. A slight rally early in October gave hopes that the decline might be checked before serious damage was done but the apparent loss to southern producers was estimated as high as \$400,000,000.

Bank Clearings

ONE measure of movement, bank clearings, moved counter to most of the others in September in recording a small decrease, 1.5 per cent in the aggregate total, from September a year ago. While some of this, especially the decline at the south, was directly traceable to the break in cotton prices, it might be noted that leading Florida and Georgia cities reported the heaviest relative decreases. Part of this was no doubt due to comparisons being with big clearings a year ago when a boom was on, part was due to the effect on collections of the suspensions of many country banks earlier in the summer, part again to the actual stoppage of transactions by the great coast storm's flight across southern Florida.

In the northwest delay in crop movements due to wet weather or actual shortages in yield was reflected alike in bank clearings and car loadings. New York City, Philadelphia, and some other large centers also reported lessened totals. On the other hand New England, central western and Pacific coast cities reported good gains despite the fact that September a year ago saw big increases over August totals. Three-fifths of all cities showed gains over September a year ago despite the decrease in grand totals.

For nine months mail order sales gained

11 per cent, chain stores 13.8 per cent and department store sales 4.0 per cent over the like period of 1925. It might be stated as a sort of cautionary signal that comparisons from October onward were with exceptionally good buying a year ago and the maintenance of these gains seems problematical in view of low cotton prices and rain and flood damage in the west.

Auction sales of rugs and carpets in the early part of October brought evidence of heavy buying power for these goods.

Manufactured goods of all kinds fell 9 per cent from August a year ago while raw foodstuffs gained 74 per cent. It should be noted, however, that manufactured goods totalled \$156,000,000 against \$50,000,000 of raw foodstuffs. August exports of all kinds were \$50,000,000 in excess of imports but for eight months imports exceeded exports by \$16,000,000 or by half of one per cent. Compared with the like period of last year exports were 4 per cent less while imports are 9 per cent more.

Failures in September were the fewest for a year but for nine months of this year there were 5.3 per cent more failures and 29 per cent greater liabilities. The large increase in liabilities is accounted for mainly by bank suspensions in Florida, Georgia, South Dakota and Iowa.

Some old time economists linked silver and cotton prices together in movements up or down. Silver broke 5 cents an ounce in New York in September while cotton broke 5 cents a pound. Silver went down to the lowest price in six years on liquidation by Chinese interests and talk of India going on a gold basis. Cotton touched the lowest price in five years on estimates of a record cotton crop on a record acreage.

Railroad Earnings

AUGUST car loadings were 2.2 per cent ahead of a year ago while August gross railway earnings were 4.2 per cent larger. Net operating income for August was 6.4 per cent larger than a year ago in the same month.

Railway stock averages in September made a high of 123.33 the top of the year and \$10 a share above January. Industrial averages in September reached a high of 166.10 as against an August high of 166.64 and 162.21 the high of February last. Rail averages on September 30 this year were 121.23 as against 102.60 a year ago. Industrial averages were 158.19 against 144.77 in 1925 at the same date. The average price of 40 bonds on September 30 was \$94.76, 39 cents below September 1 the high point of the month but comparing with \$92.19 a year ago.

For the sixth successive month, building permitted for in September fell below the like month of a year ago when gains were very large. Every group of cities showed a decrease from August and all but one, the central western, showed decreases from September a year ago. The decrease from August at all cities was 10.5 per cent and the decrease from September, 1925, was 10.4 per cent. New York City and the other cities as a whole both fell off about the same percentage from last year. For nine months, permitted-for building is 5.4 per cent below a year ago but 9 per cent above 1924.

BUSINESS INDICATORS

Latest month and the average month to date for 1926 and the average month for the years 1925 and 1924 compared with the average month for the year 1923.
Average Month, 1923 = 100%

	Latest Month 1926	Average Month to Date 1926	Average Month 1925	Average Month 1924
Production				
Pig Iron.....	94	98	91	78
Steel Ingots.....	111	110	107	85
Copper (Mine Output, U. S.).....	117	117	114	107
Zinc.....	117	118	111	105
Coal (Bituminous).....	103	96	93	86
Petroleum.....	109	100	104	97
Electrical Energy.....	132	128	118	90
Cotton Consumption.....	92	100	99	85
Automobile Production.....	129	119	106	89
Rubber Tires.....	131	136	134	114
Cement—Portland.....	148	113	117	109
Construction				
Contracts Awarded (36 States) Dollars.....	164	135	146	113
Contracts Awarded (36 States) Sq. Ft.....	126	125	131	103
Labor				
Factory Employment (U. S.).....	91	92	92	91
Factory Payroll (U. S.).....	95	96	95	92
Wages—Per Capita—(N. Y.).....	106	106	104	103
Cost of Living.....	105	106	104	101
Transportation				
Operating Revenues.....	103	97	97	94
Net Operating Income.....	143	107	116	100
Freight Car Loadings.....	120	105	101	98
Net Ton Miles.....	109	101	100	94
Trade—Domestic				
Mail Order House Sales.....	126	120	123	107
Department Store Sales.....	85	96	106	101
Wholesale Trade.....	103	99	101	99
Chain Stores.....	124	118	127	112
Trade—Foreign				
Exports.....	111	107	118	110
Imports.....	106	118	111	95
Finance				
Debts—New York City.....	129	141	131	111
Debts—Outside.....	113	118	114	102
Failures—Number.....	92	113	113	110
Failures—Liabilities.....	67	74	82	101
Stock Prices—20 Industrials.....	160	161	142	105
Stock Prices—20 Railroads.....	147	136	122	105
Shares Traded In.....	194	195	196	119
Bond Prices—40 Bonds.....	110	110	107	103
Bond Sales.....	82	110	124	137
New Securities Issued.....	92	106	103	80
Interest Rates—4-6 mos. Commercial Paper.....	88	84	81	78
Wholesale Prices				
U. S. Bureau of Labor Statistics.....	97	99	103	97
Bradstreet's.....	96	97	104	97
Dun's.....	98	99	104	100
Fisher's.....	94	96	101	94

Prepared for NATION'S BUSINESS by General Statistical Department, Western Electric Company, Inc.

Exports of foods, coal and coke and petroleum and its products furnished most of the gains, as they did a large percentage of all exports leaving the country in August. Lower prices for raw cotton offset increased shipments of this product. The four groups furnished 52 per cent of all exports and combined gained 20 per cent over a year ago whereas all other products combined decreased 12 per cent from August, 1925.

Exports of wheat and wheat flour totalled \$81,000,000 for July and August as against about \$35,000,000 in the like months of last season. In bushels about 55,135,000 went abroad against 20,608,000 bushels a year ago in the months mentioned. Bituminous coal valued at \$16,702,226, went abroad as against only \$7,847,000 a year ago in August and of petroleum \$46,656,000, went out as against \$42,341,000 a year ago.

Raw cotton exports in August were 25 per cent ahead of those of a year ago but values fell nearly 3 per cent.



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Continental Oil Co.	Manhattan Oil Co.	Shell Oil Co.
Cuddeon Oil Co.	Marland Oil Co.	Sindair Oil Co.
Economy Gas & Oil Co.	Metro Oil Corporation	Standard Oil Co.
Empire Gas & Fuel Co.	Mid-Continent Ref. Co.	Texas Co.
Great Western Oil Co.	National Refining Co.	Texoma Oil & Ref. Co.
Gulf Refining Co.	Prairie Pipe Line Co.	Tidewater Oil Co.
Hawkeye Oil Co.	Pure Oil Pipe Line Co.	Waite-Phillips Oil Co.
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Cleveland, Ohio
Columbia, S. C.
Columbus, Ohio
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Dallas, Texas
Davenport, Iowa
Dayton, Ohio
Denver, Colo.
Des Moines, Iowa
Detroit, Mich.
Dubuque, Iowa

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Everyman and His Bank

VII—In Which the Young Printing House Head Finds Out Some Surprising Facts About Stopping Check Payments

By DALE GRAHAM

Illustration by Emmett Watson

VICE-PRESIDENT Vernon Martin, of the first National Bank, felt a hand grasp his elbow as he stepped into the bank's big revolving door to begin his journey homeward after a strenuous day.

"Wait a minute, Mr. Martin, and I'll drive you out home." The speaker proved to be Lucifer Smith, president of the Climax Printing Company, and a customer of the First National.

Stop-Payment on a Check

THE BANKER made a complete circle of the revolving door and returned to the lobby to face the printer with a smile. "That's the most attractive proposition that has been presented to me today. I am one of those fellows, you know, that Providence has ordained to be without an automobile no matter how many he might own. My wife has assumed complete charge of the big car, and the boy has adopted the Ford. As a consequence, I ride the street cars or a taxi

unless a good Samaritan like yourself comes along."

"I'll be your chauffeur gladly, but I can't qualify as a good Samaritan tonight. I don't feel righteous enough. I've come very near being swindled, and I am not in the best humor about it. Just a minute; I want to give Bruce a stop-payment order and head off the crook."

Stop-payment orders to a bank are easily given and readily accepted. It was not more than three minutes before Lucifer and the sturdy little banker were crossing the street to where the printer's car was parked.

"It was a peculiar deal, Mr. Martin, and just luck that I caught on to it. I feel rather proud of myself at being slick enough to beat a crook at his own game. As it is, I come out a little ahead."

The fact that Lucifer essayed into the subject even before the car got under way seemed to bear out the statement that his pride was functioning well.

Mr. Martin's mind was inclined to center upon the sheer recklessness of Lucifer's driving, but he found words to put in a question that would evidence some interest.

"Who tried to crook you, and how did he do it?"


Buying Bargain Ink

"WELL, it happened this morning." Lucifer barely slipped through an intersection as the traffic signal changed. "A meek-looking man came into the office and represented himself as the former agent of the Progress Ink Company over at Canonsburg. According to his story, he had gone broke and was left with a big stock of inks on his hands. He wanted to sell out the whole smear, which he had brought along in a truck. The sample he brought was all right, the manufacturers are reputable, and the price was low. I agreed to buy. Why shouldn't I?"

"No reason why you shouldn't." The



The \$10,000 check was declared a forgery



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"Our shipments, which go by parcel post and express all over the United States, average 25% lighter than wooden boxes. This gives us a 33% decrease in transportation charges because we can now ship by parcel post much that formerly had to be shipped by express.

"In addition to all these economies we have noted a great freedom from breakage and claims enroute."



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vice-president managed to keep abreast of the story, though his mind was still concentrated upon the manner in which the machine was being propelled through the heavy traffic.

"Well, I bought—maybe I'd better say 'I bit.' This afternoon a truck came up and unloaded the stuff, and I gave the man the firm's check for five hundred dollars. Somehow or other my detective mind happened to be on the job, and I noticed the truck didn't have a license plate in the back. I looked in front, and that plate was missing also. At the time it didn't seem important, but after they left with the truck and my check, the fact kept preying on my mind.

Watered Ink

"I DECIDED I'd better take a look at that ink. I did, and the first two or three cans were quite all right. Then I came upon one that seemed mostly water. By the time I checked the rest of them I discovered that more than four-fifths of the cans contained colored water and coal oil. You can imagine it didn't take long for me to dash down here to stop payment on the check. Luckily it hadn't been presented, so the net result of the transaction is that Lucifer Smith and the Climax Printing Company get the cans of good ink for nothing."

The banker smiled. "No, I don't suppose the fellow will show up for his ink even if you succeed in stopping payment on the check."

"If he does, I'll have him arrested. But what do you mean, 'if I succeed in stopping payment on the check?'"

"Just what I say. You may not be as safe as you think you are."

"Well, Bruce took the stop-payment order, and if the bank pays the check, the loss will not be mine, will it?"

"Oh, the First National won't pay it—that is, unless some clerk makes a mistake."

"Well, then what have I to worry about?"

"What's to keep the ink man from cashing his check somewhere else and getting it into the hands of an innocent party?"

"What do you mean 'innocent party?'"

"Why, what the law terms a 'holder in due course.'"

"And still I don't know what you are talking about. If a man cashes that check and the bank won't pay it, he's out of luck, isn't he?"

"Well, not necessarily, as long as he acted in good faith and he can recover on a judgment from you."

"I must confess, Mr. Martin, that I don't understand."

"Perhaps not. Do you know what a negotiable instrument is?"

"Only vaguely. A check is a negotiable instrument, I believe."

"Correct, as far as you went, but you didn't go far enough. I asked if you knew what a negotiable instrument is—not what is a negotiable instrument."

"Well, if you expect me to quote statutes, then I don't know."

A Negotiable Instrument

"I CAN'T quote statutes, either, but I can give you the idea. You are right—a check is a negotiable instrument. So is a promissory note or a draft, or even a five-dollar bill. They are governed by a peculiar set of laws, based on expediency more than on reason. Most laws, as you know, try to aim at justice. Those governing sales, the passing of titles, the descent and distribution of property, contracts, liability of a principal for acts of his agent, and so forth,

are based on what seems to be the squarest deal for everybody concerned.

"On the other hand, the negotiable instruments law is arbitrary, and is admitted by every one to work hardships occasionally. Yet its rules are considered necessary to make possible the tremendous volume of check, note, bond and commercial draft business that is carried on throughout the country. We couldn't get along without our system of bank checks and drafts. There isn't enough currency to go around, even if we would care to use money for all our transactions. But there is one thing the framers of the Negotiable Instruments Act realized—that if people are going to take checks and notes in business transactions, the law must take care that they don't run any more risk of being stung than is necessary."

The car had stopped in front of the banker's home, but Lucifer was interested and shut off the motor in anticipation of a long wait. So far he understood very little of what Mr. Martin was saying, but the idea that his stop-payment order might not save the five hundred dollars provoked unusual attention.

"Let me get down to a concrete example," the banker continued.

"I wish you would," Lucifer grinned.

"Well, then, suppose you went to New York and bought an automobile, giving a check for it. The dealer would deposit the check in his bank, or he might turn it in to someone else. Before the check got back here to the First National, it probably would have passed through two or three banks. Now, outside of the automobile dealer who first took your check, nobody who handles that check and advances the cash on it knows you or who you are. But they take the check because it is a negotiable instrument and because the law will protect them.

Holders "In Due Course"

"THE DIFFERENCE between 'negotiability' and ordinary 'assignability' is this. A man who buys a book account, or a debt, or a contract, or even a promissory note that doesn't conform with the law's requirements for negotiability, gets exactly the same rights the seller had—nothing more. If the debtor could resist collection from the seller of the note or claim, then he can also resist it as against the assignee, or buyer. But a man who, in good faith, takes a negotiable note or check gets something more—he gets an absolute right to collect the money even if the original holder could not have done so.

"Take the auto case, for instance. Suppose the car proved to be no good, or even suppose the dealer didn't own it and you got no title. You could beat him in a lawsuit if he tried to collect. But suppose he cashes that check and then goes to Australia with the money. Who loses?"

"Why, I'd think the fellow who cashed it, if I got my stop-payment order through in time."

"That's where you are wrong. If one of those banks finds itself holding that check, and wasn't guilty of fraud or negligence in cashing it, it can collect the money from you notwithstanding the fact that you were defrauded. That's because the bank is a 'holder in due course.'"

"What's the difference between that and my ink case?"

"None whatever. I selected the automobile example because a reference to the ink case might have had a disquieting effect on you."

"Still I don't know what constitutes a 'holder in due course.'"

"There are several tests; perhaps I can give them to you, if I'm not too rusty on the subject. One is that the check or note must be complete and regular on its face—that is, it must look all right. Then, the taker, to be a 'holder in due course' must receive it in good faith and for value, without any notice of infirmities. If it is a note, it must not be past due, or the buyer cannot be a 'holder in due course.' In short, if a man takes a check from a person he knows to be the payee, in good faith, and actually pays the money for it, then the law will protect him even if the payee got the check through a fraudulent transaction.

"That means that if the man who sold you the fake ink should take your check to a bank where he is known, or to anyone else who might cash it in good faith—then, even if the First National were to refuse to honor it, you would be liable in a lawsuit. The man who sold the ink couldn't make you pay, but if he gets the money and skips the country the fellow who took the check in good faith and for value can collect."

"That doesn't seem right. The law protects the guilty."

Why People Take Checks

"NO, IT doesn't. You could get a judgment against the man who defrauded you, if it were worth anything. The theory of the law is that, of two fairly innocent parties, the one who makes possible the loss must suffer. You issued a check for bad ink, and if someone cashes it for the crook without knowing you have been defrauded, then he shouldn't suffer because you weren't careful enough to look at all the ink cans before you turned loose the check."

"I suppose there is something in that."

"Yes, and it's the only rule that would work. People wouldn't take checks if they weren't protected against hidden legal defenses that the makers might be able to set up. There is a lot to this negotiable instruments business, and every little while someone gets stung by the laws that are designed to protect rather than prejudice business transactions.

"For instance, a thing happened down south recently that made us decide to stop certifying our customers' checks, and issue cashier's checks instead. Some men went to a town in Texas and presumably opened up some sort of business. Their bank account ran around ten or twelve thousand dollars, and they gained the complete confidence of the bank. One day a stranger came in with a check for ten thousand dollars, signature and everything genuine. He explained that since he was a stranger he wouldn't ask for the money—that he didn't want it, anyway. What he wanted was the bank's certification on the check so he would be sure of getting the ten thousand when it came through in the usual way. The bank complied, and made a debit ticket to charge the customer's account.

A Twice-Paid Check

"SHORTLY thereafter, an overdraft occurred and the firm was called on the phone. To the bank's surprise, the ten thousand-dollar check was declared a forgery. It waited, and the certified check did not return. Within a month or so the matter came to a head, and the firm sued the bank to make it credit back the ten thousand. Meanwhile, there was still no trace of the certified check. The trial took place, and the bank had nothing but its debit ticket to show

COME TO
HAVANA

Cuba

Exquisite Isle of Delight

Havana...wealthy, gay, sophisticated...quaint medieval scenes and customs mingling strangely with modern life and progress...stately homes, great hotels, smart shops...theaters, cafes, the opera...the elite of the world gathered nightly—dining, dancing, wooing the Goddess of Chance—thriving the beautiful Casino in a scene of brilliance and luxury.

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New sights...new experiences on every hand...romantic, old world atmosphere...soft cadences of foreign tongues...and, over all, the spontaneous gayety and freedom from restriction that marks the joyous Latin scheme of life.

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For information apply to any Cuban Consul or to the National Tourist Commission, Havana, Cuba



(In Cuba even the warmest summer day is made pleasant by the cool trade winds. The temperature during 1925 never rose above 93 nor fell below 66 degrees.)

Cuba is only 90 miles from America.



When writing to NATIONAL TOURIST COMMISSION, HAVANA, CUBA, please mention Nation's Business

Bonded Floors

in the

Standard Oil (N.Y.) Building

AFTER all, what better guide can a buyer follow than a good testimonial—an opinion from a man or an organization whose judgment is worthy of respect?

And so, when next you buy business floors, why not investigate the floors that were selected by Standard Oil for corridors and office space in the vast Standard Oil Building, New York? Let us tell you why the management of this great skyscraper recommends **BONDED FLOORS** to all new tenants. You should know about the quiet, comfort and easy maintenance, distinctive good looks and *guaranteed durability** of the various types of **BONDED FLOORS**.

Write our Dept. N to-day for complete information on the nation-wide service given by our organization of flooring specialists.

**Modern, scientific installation of resilient floor materials made in our own mill enable us to back the durability of our floors by a Guaranty Bond, issued by U. S. Fidelity and Guaranty Company.*

BONDED FLOORS COMPANY, INC.

New York Philadelphia Boston Cleveland Detroit
San Francisco Distributors in principal cities

MANY thousand square yards of Bonded Floors of Gold Seal Battleship Linoleum and Gold Seal Treadlite Tile are rendering excellent service in this modern office building.

Architects: Carrere & Hastings. Contractor: C. T. Willh, Inc.



the jury, and the statement of an officer that the original check was genuine. A judgment followed, which the bank paid. Then the firm's officers took the ten thousand and left town. A few days later, the certified check came in, having been cashed in good faith by a bank in a far-away eastern city. The Texas bank was out the ten thousand dollars, for the eastern bank that cashed the check had a right to rely upon the certification. To avoid that happening to us, we now keep the customer's check and issue our cashier's check."

"What if the crooks were to raise it?"

"That wouldn't hurt us, for under the negotiable instruments law we can't be held for any more than the original amount of the check. The raising constitutes forgery, and forgery is a good defense even against a 'holder in due course.'"

The banker opened the car door and stepped to the running board.

"I don't want to detain you, Mr. Smith, for I think you had better go and report the case to the police. Catch your man before he gets someone to cash the check."

Lucifer adopted the banker's suggestion and drove in his characteristically reckless manner to the police station.

"I hope that bird doesn't know any more about negotiable instruments than I do," he murmured as he stepped on the gas. "Maybe he will be dumb enough to take that check to the First National. If he doesn't, I guess I'm sunk."

Business Growing, Says Chamber

CONTINUED improvement in business conditions is predicted by the Chamber of Commerce of the United States, in a quarterly statement discussing the record business of the first nine months of 1926. This report on business conditions is here reprinted.

The first of October is an excellent time to take stock of the accomplishments in nine months of the year and to examine the prospects for the three months in which American business of many kinds reaches the peak of activity and the nation reckons up its harvests.

With a greater degree of confidence than has been possible at any other time since 1914, we can begin to look ahead; for we now have evidence that even our most difficult situations are improving.

Through the accomplishments of the first nine months of 1926 runs evidence of this kind. It has been a period characterized by wide participation in the advance that has been made.

The year is noteworthy for its high level in production. In every month of 1926 the manufacturing plants of the country have given more employment than in 1925 and by a still greater margin they have had larger payrolls. Analysis of the figures shows that these have been the facts, not merely as to the manufacturing industry as a whole, but as to a remarkably large number of the branches of manufacturing industry. In other words, these increases have come nearer to characterizing all manufacturing industry than has been the case in recent years. Moreover, they have appeared in all parts of the country. When the seasonal upturn in the manufacturing industry occurred in August, an upturn which this year followed less than the usual summer recession, it appeared in increased payrolls in each of the main divisions of the country.

The advance has not been confined to manufacturing. Some of the other fields of

industrial production which have earlier shown activity upon an important scale have held their own or have shown only those restrictions which suggest the fluctuations always to be expected. In other fields where there has been long and serious depression there has been at least real improvement.

Record In Coal Transportation

AN example is the production of bituminous coal. The demand for coal has now brought production to a level which apparently leads the railroads to expect that the total they will have to haul this year will be around 575,000,000 tons. If such a figure is attained, it will be the record for the country and will be remarkable in the face of the great development which has occurred in the use of other sources of power and in increased efficiency in utilizing coal for the production of electric energy. In August of this year we were using electric energy at a rate never before reached in the summer, and when available the figures will undoubtedly demonstrate that in October we have used more electric energy than at any other time in our history.

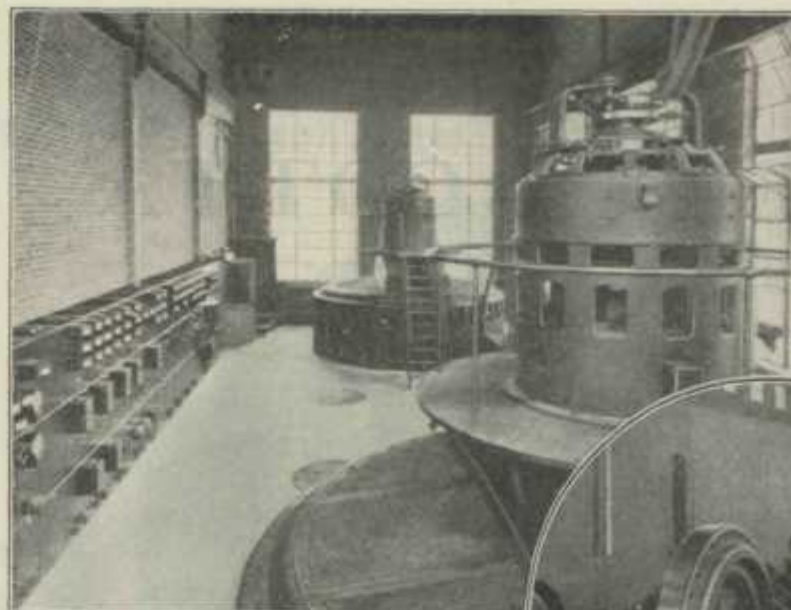
The rate of production in all fields appears clearly in the car loadings of the railroads. The average for the thirty-eight weeks of 1926 ended with September 18 exceeded 1,000,000 cars. Upon the physical volume represented by such a figure it is scarcely necessary to comment.

There is much evidence to show, too, that commodities are not merely being transported but are actually passing into use. In every section of the country, except one area in the northwest, sales by department stores in August were larger than in August of last year, and they were larger for almost every kind of merchandise. The volume has been largest, proportionately, in some of the districts like New England, where there have been important business problems affecting general conditions.

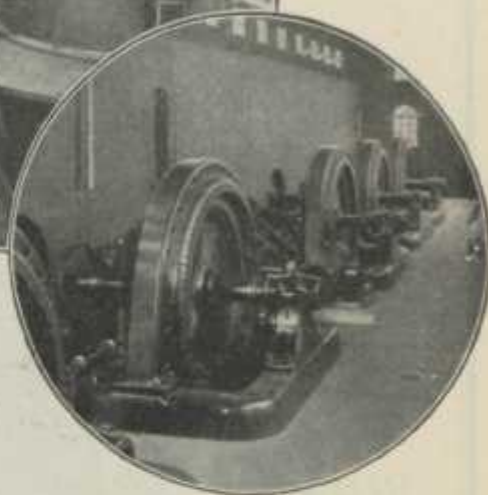
Conditions in production and distribution are reflected in bank transactions. For every month this year the debits of banks to individual accounts have been larger than in the corresponding month of last year. For the eight months for which the figures are available they were almost 10 per cent larger in the country as a whole than for the corresponding period of 1925. These figures were not only larger for the country but they were larger for each one of the twelve federal reserve districts except a district in the west, and there the recession was only by 5 per cent.

An important factor in the achievements of 1926 is the price level. Wholesale prices as a whole are considerably below their level of a year ago. The greatest decline, to be sure, has been in some farm products; but there is no group outside of fuels that does not show some decline. On the other hand, the individual articles which had shown increase in price are almost without exception articles as to which prices have been greatly depressed below the average level. This condition of recent price levels gives reason for satisfaction.

Among prices for farm products the decline in the price of cotton has been outstanding. The price of a great commodity like cotton cannot undergo the radical change which has occurred between the autumn of 1925 and the autumn of 1926 without widespread disturbance. The South is well equipped to solve this problem, however, by virtue of the progress it has made in other directions and because of its realization for cotton in preceding years.



ABOVE
After Reconstruction
7200 kw.



RIGHT
Before Reconstruction
4800 kw.

Old Water Power Developments Can be Modernized with Profit

BY redevelopment of existing water power plants, our engineers have assisted the Manchester Traction, Light and Power Company in substantially increasing generating capacities and plant efficiencies. The capacity of one plant was increased from 4800 kw. to 7200 kw. with an increase of 25% in plant efficiency. In another plant the efficiency was increased 50%.

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SAN FRANCISCO, Holbrook Bldg.
PITTSBURGH, Union Trust Bldg.

Another Beautiful

TERRA COTTA

Store Front



Store for Harry B. Dizik, Detroit, Mich., Robert Finn, Architect. Faced with a light greenish gray Terra Cotta with modeled relief ornamentation in green and yellow.

NOTE the distinctive beauty of this building. It is another example of the wide range of beautiful effects obtainable in Terra Cotta. Our booklet on Store fronts illustrates other fine examples. Copies will be sent on request.

NATIONAL TERRA COTTA SOCIETY

19 West 44th Street

New York, N. Y.

(On behalf of the Terra Cotta Industry in the United States)

As Business Views Farm Problems

TO WHAT extent are our tariffs reflected in the price of commodities the farmer buys or sells?

Are prices for our chief agricultural products made by world prices or by domestic supply and demand?

Is a policy of farm production for domestic requirements only, sound national economics; or should exportable surpluses be raised, provided costs of production allow our farmers profits? Can American farmers by adopting mass production methods obtain profits in surplus production?

Would a modification of our present immigration laws be beneficial to agriculture?

Do the various credit facilities—the Federal Land Banks, Intermediate Credit Banks, and Federal Reserve System—supply all agricultural credit needs or is there something further to be done?

These questions were asked by John W. O'Leary, president of the Chamber of Commerce of the United States, of 136 representative business men. Sixty-one replies from 36 states were received.

Occupations of those to whom the letter was sent and the number replying were:

Twenty-eight farm organizations; 15 answered. 28 business men closely connected with farming; 8 answered. 18 bankers; 9 answered. 10 lumbermen; 4 answered. 27 manufacturers; 16 answered. 4 lawyers; 2 answered. 10 transportation men; 4 answered. 11 insurance men; 3 answered.

Only one respondent wrote that he didn't see any agricultural problem, but it required two pages for him to explain why he couldn't see it. In addition to the 61 answers to the questions 14 acknowledged the gravity of the problem but expressed a hesitancy to offer suggestions for its solution.

Farm products contribute two and a half billions to our annual exports. That is almost half our annual export total. Yet that huge sum—two and a half billions—represents only 20 per cent of our total agricultural products. Such is the magnitude of the agricultural industry—the business of farming.

There was a marked unanimity of opinion in answer to Mr. O'Leary's question on the tariff. The head of a national farm association wrote:

The tariff is involved only because it is a part of a universal system which has been growing up in America for a hundred years. We have deliberately adopted a higher scale of living than is common in the countries of the Old World. In order to maintain that scale of living, various artificial devices have been resorted to. One of them is the tariff. I believe in it because I, personally, believe in maintaining our high standard of living in America. My best judgment is that the American farmers generally believe in the principle of protection.

Tariff-Created Markets

A CALIFORNIA cooperative manager wrote in a similar vein:

I am a great believer in the protective system. The tariff is, of course, substantially reflected in the commodity the farmer sells. Our whole industrial system is built largely on a protective system. The markets for the farmers' products have been largely created by the establishment of great protected industries that are employing large numbers of men at

"Yes, we can ship tomorrow"



— and he didn't have to say, "wait a few minutes", while a clerk looked up the customer's credit or consulted the stock record!

When accounts receivable, credit records, stock records, or other constantly changing accounts are kept in Brooks Visualizers, the telephone bills are smaller and customers are not irritated by delays.

They like to do business with a house that can say "yes" or "no" immediately on a long distance call.

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FOR ACTIVE BUSINESS RECORDS

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The visible portion of each of the over-lapping record sheets filed in this Brooks Visualizer is a full three-eighths of an inch wide. It gives you ample space for name, address, stock number or other index; and also room for other useful information.

Brooks Visualizers differ from all other visible loose-leaf record books in having an automatic shift. By this patented feature of the steel back you can insert a new record at any place in the index without disturbing other sheets. You can also take out a sheet and close up the space.

The simplest, easiest, and most economical way to keep and use visible records, and the only visible equipment with

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NEWSTEEL REFLECTIONS No. 6



NEWSTEEL SHEETS—good steel sheets—in the business world

SO GREAT are the advantages of sheet steel, that in the initial period of its use, any sheet steel was accepted without question. Time has shown, however, that good steel sheets—Newsteel Sheets—give that durability and beauty of finish which is so essential.

Newsteel Sheets, whether in desks, files, cabinets, partitions, or elevators, win the approval of the business man. Unrivalled strength, matchless durability, and a smoothness that assures long life to varnish and enamel finishes—these qualities are responsible for the popularity of Newsteel Sheets in the business world.

Products made of Newsteel Sheets are economical, too—in per year cost and even in first cost—because with Newsteel Sheets, fabricating processes such as bending, drawing, and twisting, are simplified and freed from failures due to flaws in the material.

NEWSTEEL SHEETS are made for those manufacturers requiring sheets about which there is not, and never can be, a question of substitute or compromise. The story of this precision in manufacture is told and illustrated in the Newsteel Catalog. A copy will be forwarded upon request.



THE NEWTON STEEL COMPANY

YOUNGSTOWN, OHIO

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high wages. This is the result of a general prosperity and the high purchasing power of the people. If anything is done to interrupt this prosperity, the farmer will be in a much worse condition than he is now.

In some cases the farmer probably pays more for some of the things he buys on account of the tariff but the amount of the tariff on a product or commodity is by no means reflected in the price at which it is sold. Many United States industries have developed under the protective system to where entire consumption is supplied by them and products are sold at a lower price than existed before the tariff was established. The tendency of a tariff is to stabilize a market—to take out the gluts and famines and to develop industries to a point where there is sufficient American competitive supply so that in the long run the customer does not suffer.

A publisher of farm papers wrote:

Admittedly, the purpose of the tariff is to raise the price in the domestic market on production of our domestic factors and if it does this on what the people in the town buy, it most certainly does on what the farmer buys.

As to the betterment of farmers' conditions via the tariff route, many replies are in substantial agreement with the idea that a New York banker and an Iowa agricultural agent put in almost identical language:

I see very little promise for the betterment of agricultural conditions through the tariff. In the first place, the lines of agricultural production where there is most distress are those in which we are producing a considerable surplus above domestic needs which must be disposed of by export.

Domestic vs. World Prices

THE second question in Mr. O'Leary's letter asked what are the price determinants for our chief agricultural products. Are the prices made by world prices or by domestic supply and demand?

"In so far as world prices are concerned," writes a California agricultural economist, "wherever we export agricultural products, our prices participate in the making of world prices and world prices react on the prices in each exporting country."

Following an argument similar to the one just quoted, a Texas banker writes:

All prices are affected in a considerable degree by mass psychology and all agricultural products would sell relatively higher if there were organized price resistance whether by co-operative marketing or otherwise.

An Iowan whose business is intimately connected with farming writes that:

It should be kept in mind, however, that the forces of supply and demand work in a good many cases rather awkwardly and that there are a good many things such as "customary prices," collective bargaining, temporary monopoly and ignorance of actual conditions on the part of buyer, or seller, or both which prevent prices from responding in a sensitive way to these fundamental forces.

A recent theory of farm economics advances the idea of farm production in such volume as to meet home requirements only and at higher prices for the producer.

It is practically the unanimous opinion of all who contributed an answer that, as one cooperative manager puts it:

It would not be a sound national economic policy to produce only sufficient agricultural products for our own use, while it would be a sound economic policy to produce exportable surpluses provided production cost would allow our farmers profit on these.

The theory of only producing for our own immediate needs in our chief agricultural products is unsound economically and practically.

Why Some Corporations Always Seem to Have the Market in Their Favor

by RICHARD S. CONWAY

Vice-President of the Brookmire Economic Service

WE sit back and wonder why certain corporations always seem to have the market in their favor. Some of these concerns—not always by any means the largest—seem to “hand pick” their markets . . . and come out of a business recession with net earnings unimpaired. And not only in marketing do these concerns appear to have everything in their favor. . . often they come through a period of shaky credit conditions with negligible losses. And more often than not, we wonder at the timeliness of their purchases of raw materials, at the way they increase their production facilities to take care of what turns out a few months later to be an unexpectedly large demand.

Does Knowledge of Their Own Business Account for These Accomplishments?

WHEN we try to determine the success achieved by these firms, our first impulse is to proclaim the genius of their individual executives in assimilating their knowledge and experience. Yet somehow or other, afterthought leads us to the belief that such unusual accuracy in estimating markets and future demand could not have resulted from a one company opinion—either group or individual.

Knowledge of One's Business A Factor But Not the Answer

IT would seem that even a most thorough experience in one's own business does not suffice. Yet, in the main, that is all the *experience* necessary. It is *knowledge* of other industries; in other words, a broad understanding of economic causes and results, that is necessary. With such knowledge marketing is on the road to becoming as effective as production, in which the United States has outstripped the world. In the possession of this knowledge lies the reason why some concerns always seem to have the market in their favor. They know, section by section, state by state, county by county just where there will be not only a desire to buy but the money to satisfy that desire. They know, before hand, how much it will cost in sales effort to show a profit in, for example, Ramsey county, Minnesota. . . whether or not it will show a profit at that time. . . and if not, *when!*

Market Conditions Are Constantly Changing. Current Data and Accurate Future Estimates are Necessary

CHART No. DX-12 shows purchasing power by counties in a certain state during 1924. Chart No. DX-14 shows purchasing power in the same territory during the following year. Black indicates good, shaded fair, white poor.

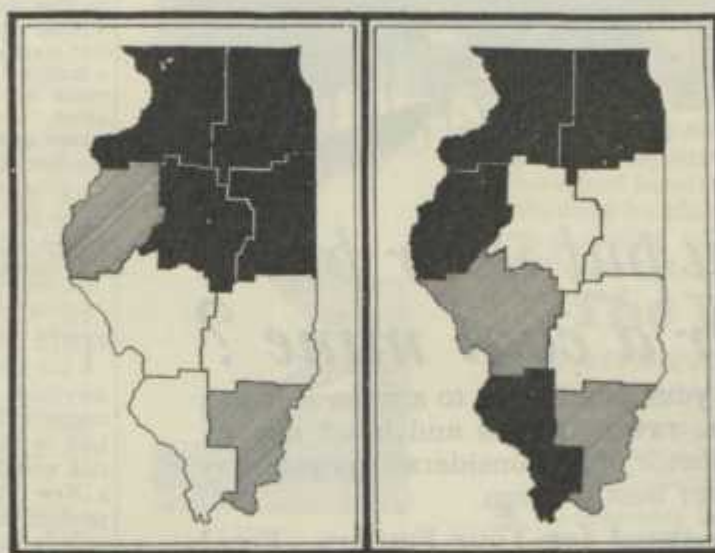


Chart DX-12

Chart DX-14

Showing changes in purchasing power in one state from one year to the next. Black; good; shaded; fair; white; poor.

Consider what it would have meant to have stressed sales and advertising in the same cities of the same counties in 1925. Wasted effort. Yet in 1924 these localities showed a fine profit. No wonder! The purchasing power had swung entirely away from some sections and had blossomed forth in others. Apply this nationally and you will understand how profits are gained or lost. Many trade centers of the country will return a profit—even in general depressions. Many will show a loss—even during an upward trend. Some products will sell during certain depressions. Some products find parts of their markets restricted in good times. To know what products will sell and where they should be sold is a phase of business to which most manufacturers are just beginning to apply sound methods.

An Example of One Phase of Scientific Marketing

THERE are many things which enter into business success besides the excellence of the product or prevailing business conditions. Proper buying of raw material, skill in ascertaining future demand in order to gauge production, wisdom in credit policies and a dozen other phases of business require constant attention.

How can all this information be obtained

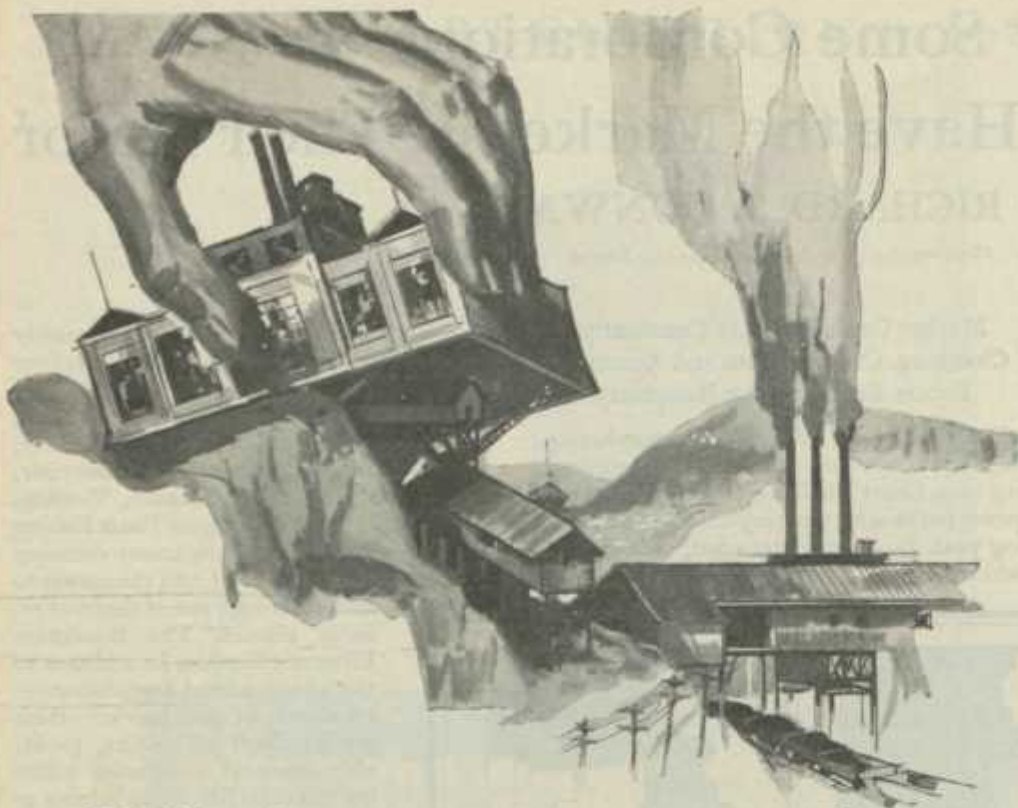
in a form that is clear, concise and readily applicable to your business? The best answer to that is: where do such firms as Standard Oil, General Motors, Beechnut Packing, Fisher Bodies, Firestone Tire & Rubber, Loose Wiles Biscuit, International Harvester, Otis Elevator, Procter & Gamble, Westinghouse, White Motor, Goodyear Tire & Rubber and scores of other nationally known successes obtain their information? And the answer to

that is: through one of the most reliable sources, The Brookmire Economic Service. In addition to the above named corporations—all clients of this Service—there are hundreds of smaller, profitably operated companies utilizing the same Service in helping to solve their marketing, purchasing, credit and production problems.

The scope of this Service is unusually comprehensive. The principal executives; Treasurers, Credit Managers, Sales and Advertising Managers, Purchasing Agents . . . all find it valuable. Facts and figures, trends and certainties, tabulated on every basic industry and weighed against existing influences are presented in a form that makes them easy to apply. And all of these facts and figures are coordinated by a method that 22 years of practical business experience in serving widely diversified industry have proved sound.

Every client receives in addition to regular weekly, fortnightly and monthly bulletins, consultation privileges which entitle him to obtain advice on any individual specific matter that he may at any time request . . . all at an annual fee smaller than a week's salary of a good executive. Send for a set of the latest bulletins today. They will give you a clear and concise idea of the scope of this Service and its application to your business. They will be sent free and without obligation. A few minutes to dictate the request to your secretary will be all that is required. We will also send you a copy of a new booklet "What an Economic Service Can Do For You."

No large corporation should be without this Service as a valuable supplement to its own research department and any smaller business will find it of value far in excess of its cost. At least take advantage of this opportunity to obtain a report on current business conditions and the outlook for the next few months. This will be included with the material which we will gladly send you to enable you to judge the value of the Service to you. Write today. The Brookmire Economic Service (Commercial Division) 570 Seventh Avenue, New York, N. Y.



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You wouldn't even put your plant *close* to a mine if it was far from your customers, raw materials and labor supply. Looking for the best *balance* of all considerations you may find Wilmington to be *your* best location.

Have Wilmington Measured for Your Factory—Free! Our consultant will make a survey of what Wilmington has to meet each of your requirements, if you will write and tell us what they are. A conservative answer to every question. In general Wilmington offers the following:

Railroads—important divisions of the Pennsylvania, Reading, and B. & O. Overnight deliveries to 20% of America's population. You can ship also by water and motor truck. You will be convenient to the biggest part of the East and yet you will escape the traffic jam of shipping from the big seaboard cities.

New Marine Terminal expertly planned to get your shipments off with speed. Large deep-sea vessels. Latest equipment for handling all classes of shipments expeditiously. Railroad tracks and through truck lanes to ship-side. Open and covered storage. Factory sites available nearby. 10 minutes from heart of the city.

Power, Fuel, Gas, Pure Water, in

abundance at low rates. Short haul from the coal mines and refineries.

City Advantages. A stable supply of labor of all grades, because this is an attractive town to live in—it is supported by the solid prosperity of its diversified industries, including the world's largest manufacturers in several lines. Model schools, many churches, fine residential and business districts and modern hotels.

Special Advantages. Comfortable Climate, favorable State Corporation Laws, and absence of radical social legislation. Wilmington is the convenient door to the fast-growing Southeast. With splendid transportation by rail and water, this is the logical city for firms and branch factories planning to serve the East, the Southeast, and foreign and coast-wise markets.

Address: Industrial Department, Room 1303, Chamber of Commerce

WILMINGTON

DELAWARE

"The Port of Personal Service"

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In the first place, take wheat for example, a farmer never knows just how many bushels of wheat can or will be raised per acre. If our planting should be governed by domestic consumption and we should have a short crop, we would be required to import sufficient to make up the deficit which would go to consumers at the world price plus the high protective tariff.

On the other hand, if we should have an exceedingly large crop we should either have to store our surplus pending a short crop or export the surplus, as at present, when the domestic price would immediately become the world price.

We purchase a large amount of commodities which cannot be produced in this country as economically as they can be produced in other countries. These commodities must be paid for in kind. And if we should confine our production to domestic demands the trade balance would be against us and would soon bring about a question which would be embarrassing to the American farmer, as it would result in many of his necessities of life costing him more.

It is questionable whether the American farmer can bring about economies by mass production that would permit him to produce at a profit and sell his crops in competition with a low standard of living in other countries. As a matter of fact the American farmer today is much more efficient than is commonly supposed. Per man power unit, the American farmer produces more than any other farmer on the face of the globe.

On the other hand one of the large grain exporters believes that economies can be brought about by the use of mass production methods.

Controlling Surpluses

THE question of surplus production brings out interesting suggestions. Because of the inevitable variation in production a miller suggests that the acreage planted be stabilized so that the only variations in production would be due to variation in yield. And a New York banker believes that "orderly production would be more important than orderly marketing."

A Dallas banker makes this point:

The country merchant and banker have implicit faith in the spring of the year when the crops are planted throughout the nation but seem determined to market in a period of sixty days what it takes from seven to eight months to produce what is really the world's supply for a year.

Another point of view is presented by a western agricultural economist:

I do not see that sound national economic policy is involved at all in any case where the farmer can export at a profit. The real question is the definition of the profit. Most farmers have not been exporting wheat at a profit except in occasional years for a long time. What they have been doing is farming for the opportunity of resale value of land to which the domestic price and the export price of wheat were subsidiary by-products in effect.

One basic difficulty with agriculture today is that the farmers have learned that they must make money on operation: with decline of farm values they cannot hope to do what they used to do before the war—make money on resales. Few forms of agriculture achieve economy under mass production. Certainly the diversified agriculture that we teach our farmers does not lend itself to that as a rule.

Immigration as a factor in the farm problem comes in for attention. Would an increase in the supply of labor be of benefit? Probably not, according to the manager of a Pacific coast cooperative association who wrote:

Most of this labor would naturally drift into the factory districts. It might result in lower wages for factory employees and lower manu-

facturing cost to the manufacturer. This might result in lower purchasing power all around but it is questionable whether this lower cost would be reflected to any great extent in the price that the farmer has to pay for his supplies, particularly if the tariff remained where it is.

If any large amount of cheap labor would drift into the sections it would simply increase production to the extent that it would aggravate the condition rather than remedy it. We have ample man power on our farms today to produce far more than this country can consume or will consume for a great many years.

Different reasons are given by a Chicago lawyer against the relaxing of our present immigration restrictions.

I feel quite clear that it would be a mistake to modify the restrictions of our immigration laws to permit a larger immigration. The reasons of the restrictions are in the interests of the entire population and modification ought not to occur in the interests of a single class as opposed to the general interests. If there were modifications it would only produce temporary relief, for the working man who would be willing to work for farm wages would soon be attracted to the factories by larger wages.

A western railroad man believes the immigration laws are now on the wrong basis, since immigration is measured by the number who came during a certain period of years which had nothing to do with our needs, but reflected only the views of aliens who happened to want to come to America during that period. There should be now, according to this contributor, selections with respect to personal qualifications and the needs of the country.

Several men in the southwest advocate allowing seasonal workers to come in for the necessary period. After their work is done they should leave the country.

The head of a large farm organization points out that farm labor is, even in the most menial tasks, more or less skilled and that the introduction of a larger volume of unskilled labor into the country would not help the farmer.

Too Much Credit

WE HAVE Federal Land Banks, Intermediate Credit Banks, and the Federal Reserve System. Do these agencies adequately care for agricultural credit needs? A definite suggestion is made by the head of a large farm organization, who says:

Credit is well taken care of except that the amortization plan of financing at a low rate of interest will help in cooperative marketing of farm products. I do not mean more credit but provision for refunding credit now used on more favorable terms and at lower rates of interest.

Last month, in NATION'S BUSINESS, Eric Englund pointed out that some bankers had been too enthusiastic in farm financing and that the excess credit extended to farmers was the cause of much of the trouble now experienced—particularly in the so-called Corn Belt.

The manager of a large cooperative society in Oregon writes:

American agriculture needs no further credit facilities. It is possible that there has been in some instances too much credit granted the American farmers. Due to the Federal Intermediate Credit Banks and through the Federal Reserve System ample credit is furnished the average farmer.

It is true that there is no production credit available. And while it is true that this has been requested by a great many people, it is,

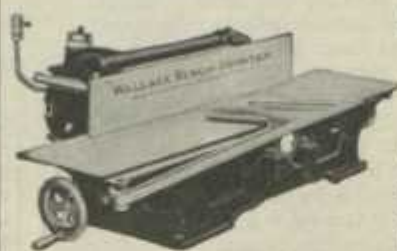
This Idea Saves Big Sums on any Woodworking Operation



This shows a Wallace Portable Saw cutting 2-inch stock. It handles this as easily as smaller pieces.



Here is a jointer making a 7-16-inch cut. It handles this heavy work, but it is capable of the finest adjustments.



Look at this Planer. You can carry it anywhere, hook on any light socket, and do jobs that you never thought possible except in a mill.

Maintenance engineers, factory managers and construction superintendents can make tremendous savings on any operation where wood is used.

At Least 30% Guaranteed

Amazing results can be obtained in increased production, saving of labor and time, by this new system of bringing portable planers, saws and other woodworking machines direct to the job. They handle quickly and easily the hardest jobs on new buildings, repairs and maintenance, factory operations, and hundreds of small jobs that have always been done by high-priced hand labor. We guarantee a saving of at least 30% where Wallace Machines are not now used.

The Wallace Idea

- 1 To save wasted steps by placing machines at the elbow of the workman.
- 2 To save time and energy by moving the machines to the material instead of bulky material to the machines.
- 3 To eliminate hand work with a convenient machine capable of handling a range of work from heavy cuts on large stock to the most exacting work on the smallest pieces.
- 4 To save investment by working machines of the proper size to capacity.
- 5 To build portable woodworking machines which possess a maximum of power at a minimum expense.

Free Trial

We are ready to prove on any job just how big a saving one or more Wallace Portable Woodworking Machines will make, without cost to you. We will put them in your shop or on any construction job, and let you see how they speed up production, eliminate waste of time and effort, save material, and do a better job. Wallace Portable Machines are proving every day how invaluable they can be, even on small jobs. The coupon or your letterhead will bring complete information without any obligation of any kind.

Wallace
PORTABLE MACHINES
BELTLESS—
Attach to any
light socket

J. D. Wallace & Company,
157 S. California Ave., Chicago, Ill.

You may send me complete information about Wallace Portable Woodworking Machines, with facts about jobs on which they have saved money, together with complete details of your guarantee to save 30%.

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Firm _____
Address _____

Let it RAIN!

Lead paint sheds water like a duck's back

"EVERYBODY talks about the weather, but nobody does anything about it."

Mark Twain was wrong. Decidedly. But he plied a pencil, not a paint brush. For painters, who work with an all-lead paint, will tell you that a lot has been done about the weather.

Rain, snow, sun—all the causes of weathering and deterioration, are turned aside when they strike the protective film of an all-lead paint.

This superior paint protection has been used for centuries. And still today in Dutch Boy pure white-lead, all who live in houses have the same sure and truly economical means to "do something about the weather."

Boards can't warp and decay when protected with Dutch Boy white-lead paint. Made from the metal lead, Dutch Boy white-lead is impervious

to moisture. Spread over any surface, it forms a tough yet resilient film that will not crack with expansion and contraction. Instead, this long-lasting paint film wears down gradually and evenly, making repainting easy.

Those who like fine things will appreciate another side of this all-lead paint. It can be easily tinted to any desired color. That means you get just the tint or shade you want. And this paint holds its color indefinitely.

There are several other economy sides to Dutch Boy white-lead. It can be mixed in any desired quantity—a half pint or twenty gallons. It can be bought in small or large amounts—1 pound tins up to 100 pound kegs. It goes far. One gallon covers, hides, protects, from 550 to 650 square feet of surface. And it can be used for almost any kind of painting job—

a chair or your whole house, inside and out.

Ask any good painter. Or if you wish helpful information ready to refer to at all times, send for this

34-page home-owner's paint guide

"Decorating the Home" it is called. Full color illustrations show unusual outside and interior effects. Easy-to-follow paint formulas, 50 color chips, and many money-saving handy hints alone are well worth a letter.

Just address your request to our Department of Decoration in care of our nearest branch. Any special questions you may have will also be gladly answered by the color and paint specialists of this department.

NATIONAL LEAD COMPANY

New York, 111 Broadway • Boston, 131 State Street • Buffalo, 116 Oak Street • Chicago, 900 West 18th Street • Cincinnati, 659 Freeman Avenue • Cleveland, 820 West Superior Avenue • St. Louis, 722 Chestnut Street • San Francisco, 485 California Street • Pittsburgh, National Lead & Oil Co. of Pa., 315 Fourth Avenue • Philadelphia, John T. Lewis & Bros. Co., 437 Chestnut Street.

Every pail or keg of white-lead bearing the Duck Boy trademark is a guaranteed all-lead product.

in our opinion, an unwise procedure to grant production credit. . . . The American farmer now asking for more credit is usually a man without collateral who would be a poor risk in any event.

Too much credit has wrought great injury on the American farmer, particularly the American stock producer in times past. Perhaps it is not too much credit but an unwise extension of the credit available.

The present system, however, does need a better understanding and more economical administration than we are at present experiencing. The interpretation of the Agricultural Credit Act of 1923 could be made considerably broader without in any sense injuring its safety and a broad interpretation of this act with reference to credit would, in our opinion, go a long way toward solving many of the farmer's present problems.

"Pools" Would Help

AMONG other interesting suggestions offered are these:

A North Dakota banker recommends more "pools."

An Illinois manufacturer urges storage warehouses under government ownership or supervision.

Others suggest the creation of facilities for the dissemination of information pertinent to the growing and marketing of crops.

A Missouri lawyer argues for the development of transportation in the Mississippi Valley.

A farm organization leader strongly advocates manufacturing plants throughout the farm country. This would provide the farmer with occupation during the dull farming season and increase his income. It would diversify the needs of the community, stabilize conditions, and bring markets nearer to the farmer.

An Indiana banker thinks the trouble lies in the fact—as he states—that the farmer has been deflated and industry hasn't. He believes agriculture is on a sounder basis than industry, and that the need of the country is not for more hands to do the work but a need for more work.

Taxation

A CALIFORNIA banker gives us his opinion:

Until the United States Chamber people come to believe that their industry, commerce, and manufacturing is largely super-imposed on the production of the soil and that the tax burden is carried disproportionately by the agriculturalists, we cannot hope to create an atmosphere where the agriculturalists as a whole will believe in the integrity of our intentions.

A Pittsburgh manufacturer in concluding his letter writes:

It has been characteristic of American life that the farmer was a king in his own domain, combining the elements of a pioneer, landed proprietor, business manager, property owner, and employer of labor, a free and independent citizen, courageous, intelligent, resourceful and capable.

From the farms in the past has come in large degree the strength of the nation. . . .

Turning from this picture to the peasantry of the Old World, the contrast is startling. There agriculture is low in the scale of occupations. I would go far on any practical road to maintain the superior status of agriculture in this country and to equalize unwholesome differences between agriculture and other kinds of activities. Certainly our national policy should be against any course tending over the course of time to bring our rural population to the social status of the peasantry of Europe or the peons of Mexico and South American countries.



Dutch Boy White-Lead

Makes an All-Lead Paint

Your road men REALIZE how marvellously a big new talking point invigorates SALES

THE use of *genuine* Stainless Steel to beautify exposed parts or safeguard working parts against erosion, abrasion, rust, corrosion, and wear, furnishes such a selling angle.

Dealers can testify how deeply *genuine* Stainless Steel has impressed itself on the mind and imagination of the consumer.

Women especially are always ready to give preference to any product marked "Stainless Steel". *Genuine* Stainless Steel has relieved them of hours of drudgery in scouring cutlery, kitchen utensils, and oven linings, and brought a new beauty into the kitchen and dining room.

And now, gun barrels, immune from pitting and leading; golf irons that don't nick, rust, or tarnish; and measuring tapes on which the etching cannot be effaced, are impressing the same lesson of Stainless superiority on masculine consciousness.

Genuine Stainless Steel is several times as hard and durable as ordinary steel, and its gleaming mirror-like surface adds a marvellous attractiveness. Few changes can be made in your products that offer such remarkable sales advantages. *None offer more in dealer and consumer interest.*

Perhaps we can aid you in discovering such improvements. In the meantime, mail coupon for "Stainless in Industry".

AMERICAN STAINLESS STEEL COMPANY
COMMONWEALTH BUILDING • PITTSBURGH, PENNA.



Talk STAINLESS POSSIBILITIES with your sales executives ~ ~ ~

*Stainless Gun Barrels
for Winchester Repeating Arms Co.*

Winchester Repeating Arms Co. has added a new selling angle to their products by putting out rifles and shotguns with "Stainless" barrels.

If you hunt, you can realize the convenience of gun barrels that do not pit or corrode, even if you are compelled to defer cleaning for a few days. Also, they resist the cutting action of hot gases and abrasive wear and tear to a degree heretofore undreamed of.

They're a boon to sportsmen—who have responded with the interest that is the life of sales.

Coupon

AMERICAN STAINLESS STEEL COMPANY
Commonwealth Building, Pittsburgh, Pa.

Send me a copy of your booklet "Stainless in Industry."

Name _____

Company _____

Address _____

City _____

State _____

When writing to AMERICAN STAINLESS STEEL COMPANY please mention *Nation's Business*

"Increase your efforts to cut production costs"

from
FACTORY
1926

TODAY'S NEED is what must be met to extend **TODAY'S PROSPERITY**. And that need is **LOWER** and **STILL LOWER PRODUCTION COSTS**.

Wasteful production practices must go—in industrial cleaning as in everything else.

Manufacturers are now studying cleaning with the same care and thoroughness as has been given to the handling of material, plant layout, time study and production scheduling, for the reason that more and more concerns in all industries are finding in their cleaning and related operations opportunities for effecting substantial economies that materially cut production costs.

Over 18,000 concerns are profiting in some worth-while way by the use of **Oakite Materials and Methods**. We are ready to prescribe low cost cleaning methods for *your* plant. Write us today. No obligation.

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1251. *Cleaning in Hotels.*
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*Stocks of Oakite Materials are carried in these cities

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JERRY HANLEY INDUSTRIAL CO., 24A THAMES ST., NEW YORK, N. Y.

What the World of Finance Is Talking Of

By MERRYLE STANLEY RUKEYSER

THE ENGINEER'S rôle is to direct energies and overcome resistance.

For five years, the largest trust company in the country has been headed by a mining engineer.

William C. Potter, president of the Guaranty Trust Company since 1921, recognizes that fibbing and withholding information on the part of business practitioners develops resistances which block the free flow of credit. Mr. Potter therefore concludes that the prospective borrower will serve himself best by telling his banker the whole truth concerning his business affairs.

System in Obtaining Loans

I ASKED Mr. Potter how the business man in quest of a loan should approach the banker.

"Borrowers," replied the blue-eyed individual who was born in Chicago fifty-two years ago, the son of a bank president of the middle west, "should have the full records of their business affairs available and be able to present them to the banker in systematic form. They should be willing to tell the banker the whole truth, for, if there are any loopholes, some one will probably discover them anyway.

"If the customer withholds adverse information about his affairs, the banker, on discovering the situation, is likely to shut off his credit, but, if he tells all his difficulties and troubles voluntarily in a candid way, there is a better feeling and the banker may be able to be helpful in indicating how to overcome difficulties. The banker has mental reservations toward customers who are secretive and is inclined to be more liberal to a customer who is open and above board and keeps his banker continuously informed about developments, whether favorable or otherwise."

Mr. Potter has sharply chiselled features, a fair complexion, and his hair is beginning to be tinged with gray. He has a facility in getting to the crux of any problem. His exposition of what the banker expects from borrowers should be of immense practical value to business men.

"It pays the customer," added Mr. Potter, "to establish friendly relations with his banker. The Guaranty Trust Company, for example, has about 50,000 customers and, through its customers and the acquaintances of the officers, has very wide contacts throughout the business community. A big bank is, in a sense, a clearing house of information.

Banks May Help Customers

"IF IT IS fully informed concerning its customers' needs and activities, it can frequently be of service in bringing men and jobs together and in bringing concerns which can profitably join hands into contact with one another. For example, one of our good clients was seeking means of expanding its already satisfactory business. Another customer of the bank had a new device of great technical value which it was not marketing properly. We introduced the executives of the two concerns and the former took over the marketing of the product for the latter to their mutual profit."

Mr. Potter expressed the view that the preponderance of current business factors indicates the continuance of prosperity for an indefinite period.

The former mining engineer, who became president of the Guaranty during the depressed days of the post-armistice deflation, does not believe that current business methods are perfect and beyond improvement.

I asked Mr. Potter to be specific and to indicate the particular avenues toward economic progress which he visualized.

"There is always opportunity for progress and improvement, and the present condition of the country offers special opportunities for progress along several lines which might be suggested:

"1. Improved industrial processes resulting from scientific discoveries, standardization of products in some industries, and a more complete realization of the economies inherent in mass production.

"2. Better transportation systems, especially the development of motor transportation, better shipping laws and railroad consolidations.

"3. Greater economy in distribution, through a wider application of large-scale methods in the distributive process and the elimination of useless middlemen.

"4. The restoration of normal financial conditions throughout the world.

"5. The development of more foreign markets and a more intensive cultivation of existing ones.

"6. The encouragement of American inventive and business genius.

"7. Better understanding and increased cooperation between business and government with less of politics and more of economics.

"8. Freeing productive enterprise and invested capital from the burden of unwarranted taxation."

The foregoing may be regarded as an engineer-banker's creed.

New Viewpoint of Industry

WITH the disappearance of pioneer days at the frontiers, business success in the United States has come to depend more on carefully conceived programs and less on lucky strikes than in the past.

I was discussing this trend recently with the thoughtful Henry Bruere, third vice-president of the Metropolitan Life Insurance Company. Mr. Bruere, who at one time was chamberlain of the city of New York, directs the Policyholders Bureau, under which the social service activities of the company are centered. It is Mr. Bruere's task to study business technique, particularly in the matter of industrial relations, and his observations are based on wide firsthand contacts with business leaders.

"A new and younger generation of business leaders," said Mr. Bruere, "is bringing a fresh viewpoint into the commercial world. I think business success is becoming more a question of *method* and less a matter of *personality*.

"I find widespread interest everywhere in business stability. There is less emotional excitement over labor turnover, for example."

In spite of a succession of man-made



Multigraph Department of The Hoover Company, makers of the universally known Hoover Suction Sweeper.



The HOOVER COMPANY

GENERAL OFFICE AND MAIN FACTORY
NORTH CANTON, OHIO

August 10, 1926

Mr. Hugh Kline,
American Multigraph Sales Co.,
Canton, Ohio

Dear Mr. Kline:-

We believe that some expression of appreciation is due you for making it possible for us to enjoy the use of three of your Senior Multigraphs. We have been users of your product for approximately ten years and during that time either one, two or three machines have been operating every working day.

The Hoover Company maintains a large Print Shop of their own and quite often our multigraphs are called upon to do the pinch-hitting or printing of forms, hand bills, etc. Most of our work, however, has to do with circular letters to our field force.

One of the most effective uses of the Multigraph is the imprinting of dealer letter heads, we believe. It enables us to offer to our dealers an imprinted letter head, with a letter multigraphed on it and filled in as well as the addressing of the envelopes. In other words, a complete letter service is offered to every Hoover Dealer, with the exception of scores of the posting expense.

There are many ways in which such letter heads can be used to advantage for both large and small manufacturers as well as wide-a-wake retail dealers.

In fact, the Multigraph makes available many methods for labor and expense saving in offices as well as means for increasing sales.

Yours very truly,

THE HOOVER COMPANY
W. H. Reed
Mgr. Cooperative Dept.



"The Many Ways to Sell the Hoover"

After ten years of experience they know that the Multigraph both SAVES and SELLS.

Read the interesting letter reproduced at the left—and then write, on your business letterhead, for the book shown below, describing the latest and most complete printing Multigraph.

THE AMERICAN MULTIGRAPH SALES CO.
1806 East 40th St., Cleveland, Ohio



the
printing MULTIGRAPH



Six-room House No. 623
Designed for the Service Department
of American Face Brick Association.



*Build for today—for
tomorrow—for twenty
years from now
with FACE BRICK*

NOW—before you start building at all—is the time to look ahead twenty years or more.

You have a right to expect rising property values in your neighborhood. But make sure that the house you are providing for the security and comfort of your family is not going to depreciate with the years.

Build of Face Brick—the *permanent* building material. Then you may be sure that every rise in property values will be more than sustained by the real value of your home.

And Face Brick offers you a range of exquisite effects in color and texture that will give class and individuality to your home as no other material.

The "Story of Brick" contains much valuable information. You should have it. Sent free.

THESE BOOKS HELP YOU BUILD A BETTER HOME

"Face Brick Bungalow and Small House Plans" embrace 128 designs of Face Brick bungalows and small houses. These houses are unusual and distinctive in design, economical to build, and convenient in floor plan. Issued in four booklets showing 3 to 4-room houses, 5-room houses, 6-room houses, and 7 to 8-room houses. The entire set for one dollar; and any one of the books, 25 cents. We can supply complete working drawings at nominal prices.

"The Home of Beauty" contains 50 designs of two-story six-room Face

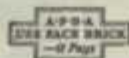
Brick houses, representing a wide variety of architectural styles and interior arrangements, selected from 350 designs submitted in a nation-wide Architectural Competition. Sent for 50 cents. Complete working drawings for these houses at nominal cost.

"The Home Fires," a most attractive fireplace book, with many designs, gives full directions for fireplace construction. Sent for 25 cents.

"A New House for the Old." Stop repairing and painting by veneering the old house with beautiful Face Brick. Booklet sent free.

AMERICAN FACE BRICK ASSOCIATION

1750 Peoples Life Building - Chicago, Illinois



booms and God-made hurricanes in Florida, the general industrial renaissance in the South continues uninterruptedly as an outstanding long-term phenomenon. The industrialization of the vast districts with an equable climate (suitable for all year round out-of-door life) south of the Mason and Dixon Line proceeds in an orderly manner—without the drama or the violence of localized boom districts. The South is to a large extent self-sufficient, but the new emergence of hitherto lethargic groups is likely to raise substantially further the standard of living in the southern states and to increase the demand not only for local products but also for merchandise produced in distant places. Manufacturers in the north, who are bent on increasing their foreign trade, might find new markets within the Union—among a people who speak the same language, use the same currency, and who will never erect tariff barriers against them.

Return of Railroad Stocks

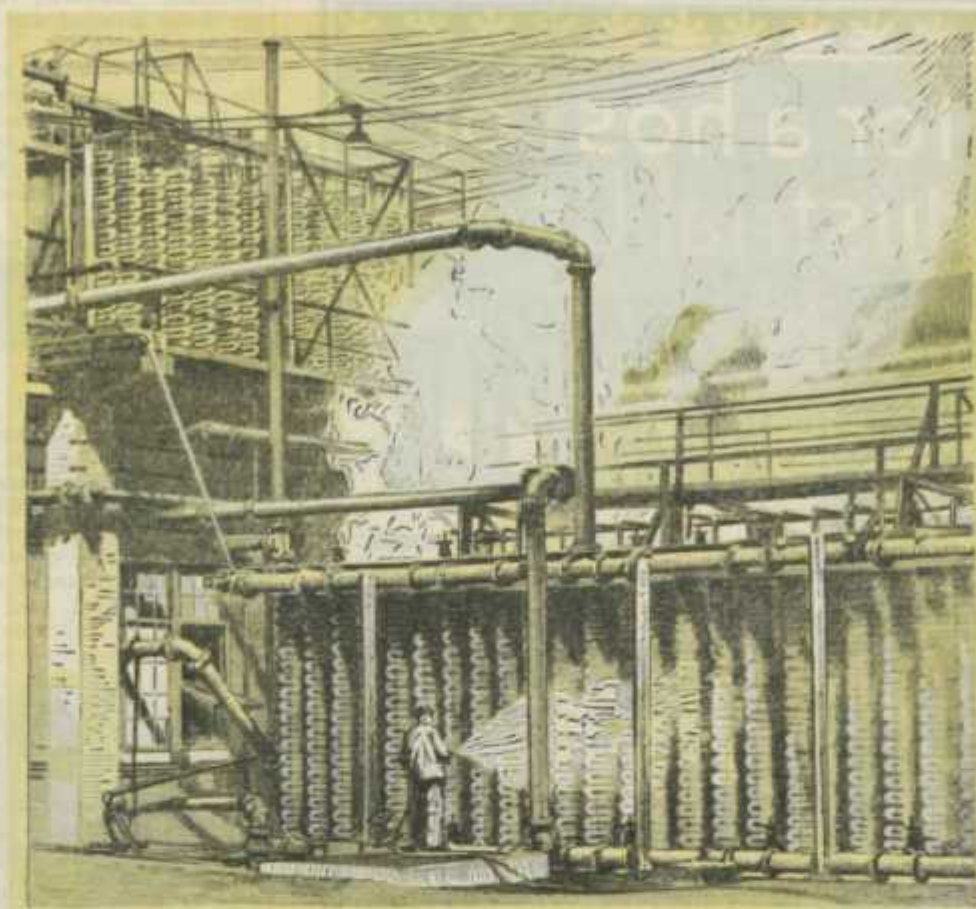
AT THE Stock Exchange, speculators for several months have been rediscovering railroad securities. Prior to 1910, railroad stocks were the elite in the investment world. Then came strangling regulation and a swift decline in railroad earnings and credit. War orders resulted in heavy traffic and a marked improvement in earnings in 1916, but, after the United States entered the fray, railroad affluence soon vanished and under government operation, expenses mounted much more rapidly than earnings. Six years ago, the carriers were turned back to their owners—undermaintained, ill equipped with motive power and freight and passenger cars, and with managerial morale as low as the depressed earning power.

In 1920, Congress passed the New Transportation Act, which was the legalization of a new attitude toward big business. Hitherto regulatory acts were devices for kicking big business around and arresting abuses. The Interstate Commerce Commission since its creation in 1887 had been progressively urged by Congress only to wield a big stick. In 1920, however, Congress amplified its position and asked the I. C. C. to assume a responsibility for keeping railroad credit good, as well as continuing to protect the traveling public and shippers. The current railroad monthly reports reflect the fruits of the new policy. The I. C. C. has been called upon within limits to establish rates which give the well-managed roads a living wage, and also to approve various new alignments and mergers, which prior to 1920 would have perhaps run counter to the anti-trust laws.

For a period of years, during the deterioration of railroad credit, prudent investors withdrew capital from railroad stocks. There was a flow of funds to newcomers in the financial world—to the stocks of a miscellany of industrial corporations. Now there is a revival of public appreciation of railroad securities, which are staging a comeback. Railroad stocks are no longer shunned and ignored. Skeptics were slow to act, however, and waited for the new relations between government and business in the railroad field to be translated into heightened earning power before making commitments. Thus, in the bull markets of recent years, railroad stocks lagged behind industrials.

In the calendar year 1926 it seems apparent that the net operating income of all the Class I railroads will be larger than in

• • CRANE VALVES • •



A view of a wash-oil cooler in the plant of the By-Products Coke Corporation, South Chicago, Illinois. The pipe coils and special fittings were designed and supplied by Crane.

Making TNT and mothballs from coal

Would you guess that aspirin is related to ready roofing? Or that there is kinship between perfumes and paints, between carbolic acid and dyes of infinite color-variety, between mothballs and trinitrotoluene? All these substances and literally hundreds of thousands of others have a common ancestor: coal! They come from coal tar, the by-product as coal is destructively distilled to give us gas to light and heat our houses, and coke for the steel mills.

To make coal thus yield its forest-wealth of forgotten ages has been a complex problem for engineer and chemist. Co-operating with coke oven technical experts, Crane engi-

neers have designed special coils and fittings that enable marked economy of layout in by-product coke and gas oven installations.

This is but another illustration of the value of Crane research and Crane knowledge based on 71 years of experience. Practically every field of human activity benefits from the safety, dependability, and economy of Crane valves, fittings, and piping. On ships at sea, in locomotives, in factories and water works and power plants, in the oil fields, and homes, for all purposes and on all pressures, Crane products are serving faithfully. You insure yourself similar service when you specify Crane.



A Crane water-controlled direct flushing valve. Economical of water; efficient.

CRANE

PIPING MATERIALS TO CONVEY AND CONTROL LIQUID, STEAM, OIL, AND GAS

WRITE CRANE CO., GENERAL OFFICES, 836 S. MICHIGAN AVENUE, CHICAGO

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is indispensable to economic service and profitable manufacture.

It is a super-hard hardwood with a dense, close-knit grain of high wearing quality. How it endures under friction is evidenced by the long life of Hard Maple pulleys; Hard Maple flooring often outwears adjoining stone door sills.

It combines great strength and resiliency with comparative lightness. Weight for weight, Hard Maple is actually stronger than structural steel and will stand vibration and shock without fracture.

Since it resists warping tendencies and is responsive to all finishes, Hard Maple plays an important part in the furniture industry and in musical instrument manufacture.

Builders of high class auto bodies, after exhaustive experimentation, insist that wooden frames give the best all-around satisfaction, and the Hard Maple demand for this purpose is rapidly increasing. Bowling alleys and pins, chopping blocks, shipping crates and boxes, are made of Hard Maple because nothing else will bear equal use and abuse.

Perhaps it offers equal advantageous utilization in your product.

Our Forest Products Engineering Department will gladly furnish you with authentic data upon the industrial application of Hard Maple, and will send you the Hard Maple Handbook FREE on request.

Northern HARD MAPLE Manfrs.
309 F.R.A. Building, Oshkosh, Wis.

NOTE: Hard Maple may be had in mixed shipments with Beech, Birch and other desirable Northern Hardwoods. Write for list of member mills.

**THE HARDEST HARDWOODS
GROW IN THE NORTH**

any previous year in the history of transportation. However, the rate of earnings per dollar invested was higher in 1916, the record year thus far.

When the railroads were relinquished by the government, private management was challenged to make good. If it failed, government operation would have been the inevitable alternative. Railroad executives have succeeded by enormously heightening the level of efficiency in moving trains. More intensive use of equipment, the use of heavier locomotives, and new passenger and freight cars helped in the improvement in the service, which, more particularly sprang from a new morale and enthusiasm among operating officials.

Railroads Are Improving

THE RAILROADS have so improved their credit that they are now in position to finance more fundamental changes which will bring them into step with the recent progress of the business of the country.

Discussing this question with me, A. J. County, chief financial officer of the Pennsylvania Railroad, said we haven't "twentieth century railroading" yet, but to a large extent nineteenth century methods and equipment. "Various significant changes," remarked Mr. County, "have awaited only the assurance that new money invested would earn a fair return, such as electrification of the lines, the construction of extra tracks, and the building of new freight and passenger terminals."

Employers give the impression that, broadly speaking, the American workingman is producing efficiently at the present time. Frank A. Vanderlip once defined prosperity as the full employment of labor at high effective wages.

Record Automobile Sales

AUTOMOBILE manufacturers long ago placed more cars in the street than the chart drawers believed was possible.

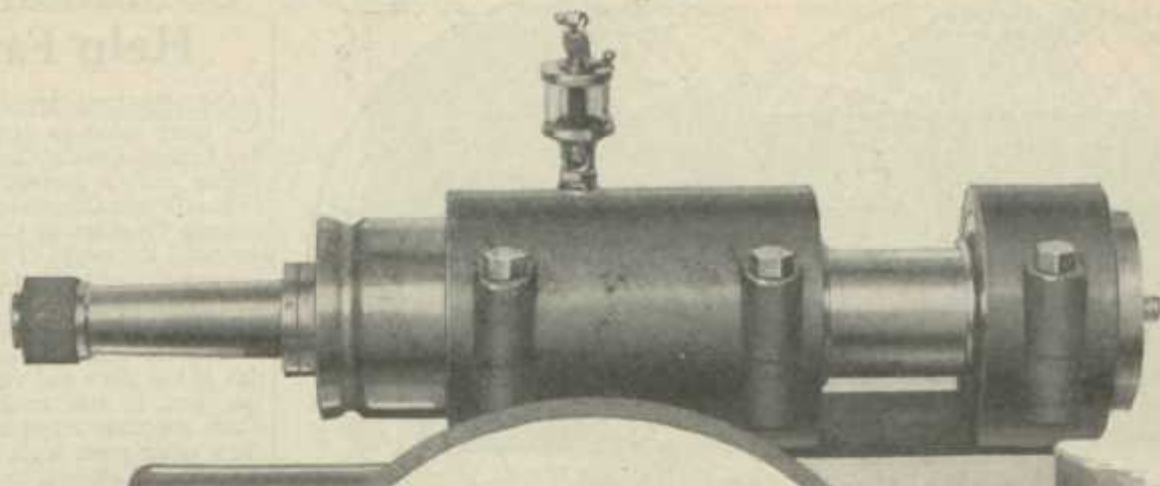
The long feared saturation point bugaboo has become less a question of the purchasing power of individuals and more a matter of extending highways and finding parking space.

Aggregate sales of cars in 1926 are not likely to run substantially ahead of the record breaking total for 1925, but the larger and more efficient companies have gained on their smaller competitors. Specifically, the General Motors Corporation has taken away business from other companies. Last year this Morgan-du Pont combination boasted that it sold one out of every five cars; now it makes and sells one out of every four.

The stock-market popularity of General Motors over a period of months symbolizes Wall Street's changing attitude toward the automotive industry. When the new vehicle of transportation was first invented, Wall Street, distinctly skeptical, yelled "get a horse." In subsequent years, it was still an unbeliever, prophesying that the rate of expansion would not last. It warned repeatedly of the saturation point which never seemed to come.

Incidentally, bankers in the financial district anticipate, as the next step in the automotive industry, an era of mergers and consolidations.

Sign of the times: The *Wall Street Journal* is now being printed in the former plant of the late lamented *Call*, Socialist daily. The *Journal's* own plant in Broad Street meantime is being renovated and expanded.



At the amazing speed of 65,000 R.P.M.

Over 1,000 revolutions per second is the speed attained by this EX-CELL-O air turbine-driven grinding spindle, and this speed was made practical through substituting ball retainers of Bakelite laminated for the metal retainers formerly used in the bearings.

The makers' own statement tells the story: "Ball retainers made of Bakelite proved in this case to be the difference between success and failure in the development of our extra high speed air turbine-driven grinding spindle built for continuous operation at 65,000 R.P.M.

"The ability of Bakelite laminated to carry a light film of oil, reducing wear to an imperceptible minimum, and the fact that Bakelite laminated is non-abra-

sive in its nature are the properties which make it essential for this service. In this case excessive lubrication must be guarded against as excessively lubricated bearings will overheat due to the churning of the lubricant." The uses for Bakelite laminated are so varied, their number so great, that its possibilities for your own product may well be considered. Our engineers and laboratories are ready to co-operate.

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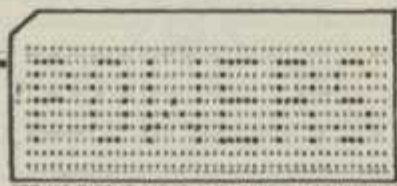
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Commission Men Help Farmers

COMMISSION MEN render service of great value to farmers, according to the Federal Circuit Court of Appeals. In dealing with a proceeding started by the Federal Trade Commission against the Minneapolis Chamber of Commerce, the court described the origin of the grain market at Minneapolis and the place of commission men in the market.

This part of the court's decision reads:

"Another and very important consideration is the place and functions of commission men in this marketing organization. There are three major elements in this, as every other great grain market. They are the buyers (millers), the elevators (usually including the exporters), and the commission men.

"Minneapolis is one of the largest flour-milling centers in the world. These mills consume between 75,000,000 and 100,000,000 bushels of wheat yearly. The water-power at St. Anthony's Falls very early invited mills, and they were established there years before the Chamber was formed. In fact, the existence of these mills was a main cause in the initial establishment of the grain market there. The vast development of the milling industry has been an outstanding feature and reason for the growth of the cash grain market at Minneapolis. All of these local mills, as well as some other mills which are within the milling territory tributary to this market, are represented in the Chamber and buy their grain there.

Elevators Furnish Storage

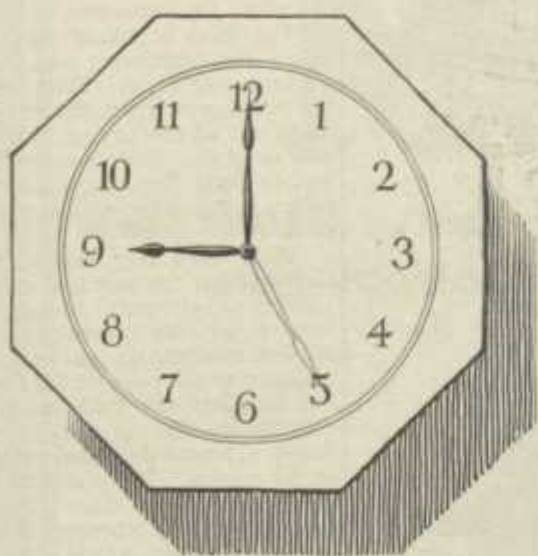
"ANOTHER class of membership is the elevator men. While some of them perform the functions of public warehousemen of grain, their place in the market (buying and selling) is as grain dealers. They are buyers and sellers of grain who receive their pay in the profit they are able to make through ownership of grain. They buy the grain at local country points or on the Chamber floor, condition it and store it until a favorable market for sale. They form a useful, in fact a necessary part of the grain-marketing business. They condition the grain and they store it.

"The conditioning of grain is useful in that it preserves it and raises its value. As it comes from the field, the grain has more or less dirt, foreign matter and other seeds mixed with it and contains more or less moisture. It is cleaned and dried in the elevator.

"Grain in storage will heat and deteriorate unless turned and handled. The elevator has facilities for keeping the grain in good condition. The crop movement from the fields is essentially seasonal and limited in time. It begins with the harvest and is speedily hauled by the farmers to the local station where it is sold or is shipped to the terminal market for immediate sale.

"The local elevator usually lacks both facilities for conditioning the wheat or capacity for storing large amounts of it. As the consumption of grain is not seasonal but an all-year matter, the large terminal elevators are necessary to store and care for the flood of grain until it is needed by consumers.

"Having the above functions and making their money from the ownership of grain, the elevator men are dealers in grain; that



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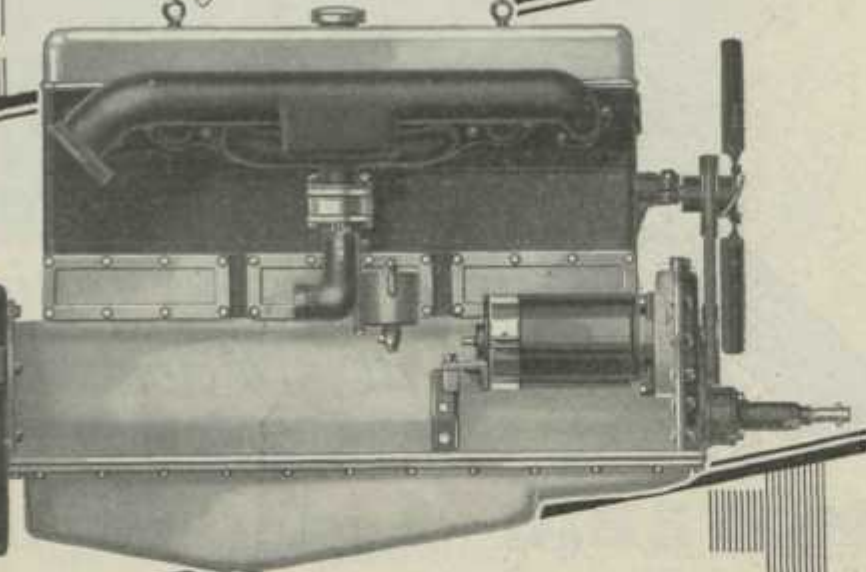
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is, buyers who do not consume but who handle and store and try to sell at a profit. Therefore, in so far as they operate on the trading floor, they are sometimes buyers and sometimes sellers. As either, they usually are acting for themselves.

"The third important class of membership is the commission men. They are not consumers of grain. They are not dealers and handlers of grain who expect to make a profit out of the buying, holding and later sale of grain. Their business is to buy or sell, as agent for a principal, the grain of others charging for such service a commission.

"While they may buy as well as sell, the fact that the principal buying interests (millers and elevators) have their own members on the floor naturally aligns the commission men on the selling end of a vast majority of the sales on the floor. As none but members can trade on the floor, the commission man is the channel through which a nonmember can transact business in the market. The producers of grain are the largest selling class. The commission man is their only representative in the great terminal markets, which offer a ready and constant market for grain, and the transactions on which make the prices for grain.

"We are not concerned in this suit with any other theory or plan of marketing than the one actually existing and in operation. As grain markets are not organized, the commission man is the salvation of the grain producer. We need go no further than the history of this particular market to find ample proof thereof.

Millers Made Grain Prices

"BY 1860, there were twenty mills at Minneapolis. From 1860 to 1880, practically the only demand for wheat at Minneapolis was to supply the mills there. These mills had formed the Minneapolis Millers' Association as a purchasing agency. This agency sent its representatives out to the local shipping points. In some instances, there may have been country elevators operated by the mills. There were elevators established along the lines of the railroads at country shipping points, known as 'line elevators,' and owned by the railroads or by elevator companies.

"Prior to 1880, the flow of grain was almost entirely to the mills, the consignment business was insignificant, and the millers were in control of the situation. This was a most disadvantageous situation for the producer. He had no terminal market to which he could consign his grain and no one who could represent him at the terminal. He was confined to the limited market at his local shipping point.

"At that place his only customers were the organized buying agency of the millers or the line elevator which must later sell the wheat to the millers making a profit for itself. Thus the producer had his market limited to the local shipping point and, even in that market, was at the mercy of the buyers. The inevitable result of this situation was that the producer was compelled to accept much lower than his wheat was worth—at times as much as ten cents a bushel less.

"Men who were familiar with selling grain as a business recognized the opportunities presented. They came into this field as commission men who would receive consignments from the country and sell to the millers at Minneapolis or, if no satisfactory market could be found there,

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A railroad company, whose securities are widely held, recently called for redemption one of its bond issues. Because of a conversion privilege these bonds were selling in the market for about \$350 more than their redemption value.

As the conversion privilege would expire automatically thirty days prior to the redemption date and investors could secure this profit only by taking quick action, Irving Bank and Trust Company brought these facts to the attention of its customers.

That this unusual service was of benefit to them is clearly shown by the following extracts from acknowledgments:

"The information is of material value."

"We thank you for this rather unusual service."

"We consider this an ideal service on the part of your Bank."

"This sort of information received from your Coupon Department from time to time, relative to bonds that have been called, is very helpful to us."

Irving Bank and Trust Company endeavors at all times to protect and further the interests of customers.

OUT-OF-TOWN OFFICE

IRVING BANK AND TRUST COMPANY

Woolworth Building, New York

would forward the grain to some other terminal market for sale. The opposition of the millers to this interference with their buying monopoly is graphically revealed by an experience of one of those early commission men as follows:

"Shortly after coming to Minneapolis I sent out circulars to all former patrons announcing that I would handle their grain on commission. A few days later came a letter from a farmer at Luverne informing me that he had shipped three cars of No. 1 wheat, such as was desired by the millers.

"When the cars arrived I took a sample from each, went to the 'agent' of the Millers' Association and asked for a price. 'Where did this grain come from?' he asked. 'I thought it was quality of grain rather than point of shipment you were seeking,' was my reply. He then explained that if the grain was shipped to me from a station where the Millers' Association had an agent, the mills would not buy it. They had an agent at Luverne and he refused to buy it.

"Nothing was left for me to do but ship it to Chicago. The wheat was loaded in cars which the railway refused to allow to leave their lines. Hence I requested that three larger cars be parked alongside the grain cars, hired half a dozen men with shovels to transfer it, and went to bed. Next morning when I drove to the siding I found the millers' agent on deck. He asked me what I was doing with the wheat and then offered to take it off my hands at the price I had quoted the preceding day."

Commission Men Made Market

THE effects of this intrusion and establishment of the commission men were as follows: It established a terminal market where the producer could sell his grain through a trained agent. It broadened the usefulness of that market by bringing in other buyers than the local millers, because the very establishment of such a market attracted outside buyers. It released the sellers from the domination of buyers at that market, because the agent could, if advisable, forward the grain to some other terminal market.

"It gave the producer the valuable services of a selling agent who knew the grain trade, was familiar with grain prices and the conditions affecting them, and was interested in procuring the highest price for the grain. It relieved the producer from the buyers' monopoly of the country shipping point market. It provided a ready market for the increasing production of grain naturally tributary to Minneapolis and one where the prices were in harmony with the grain markets of the world.

"It insured the producer the value of his wheat as determined by the markets of the world, less only the necessary marketing expenses and the selling commission, instead of leaving him at the mercy of the buyer at his local shipping point. It raised and stabilized the prices at the local points because the producer could ship to the terminal if the local price offered him was out of line with that at the terminal.

"In short, it substituted the buyers of the world for the country shipping point monopoly of millers or of line elevator men. . . . Another development has been that the line houses have become largely owned by or identified with the large terminal elevator men. These changes in condition were initiated by, developed because of and, at present, depend largely upon the commission men."

Comment on "If I Were Dictator"

EDITOR, "Nation's Business."
DEAR SIR:

I have just read Senator David A. Reed's article appearing in NATION'S BUSINESS entitled "If I Were Dictator." So far as he refers to the Interstate Commerce Commission, he exhibits a very narrow and superficial view of the situation. I hold no brief for the Commission, but my intimate knowledge of the work of that important governmental institution and the results to the public and the railroads which have flown from its activities are warrant enough to present a glimpse of the other side of the picture the distinguished senator paints.

In the first place, railroad managers of vision and foresight acknowledge that the work of the Interstate Commerce Commission is not and has not been all restrictive. The simple fact is that the constructive part of the endeavors of the Commission far exceeds the exercise of any pure restriction.

Rebates Were Common

CASES presented to the Commission show that previous to the year 1900 the railroads in general did not collect from important shippers more than 80 per cent of their published tariff rates. Previous to 1906 the passenger service of the carriers of the country generally was used simply as an adjunct of their freight business. For many years previous to the last-named date any man who shipped freight over any railroad and did not have passes for himself and family over that line was a peculiar and short-sighted individual.

For example, in the year 1905 I was private secretary to a congressman, and as such received a pass for myself and wife for a round trip, Chicago to Washington. On leaving Chicago the train consisted of nine Pullman cars, and the conductor told me that there was not a cash fare paid for the entire trip to Washington. The train was filled with congressmen, their secretaries and families.

A great amount of constructive work which does not appear in published opinions has been done by the Commission. For example, the simplification and unification of tariff publications required by the Commission are saving and have saved the carriers of the country millions of dollars annually in printing and circulation costs.

Saving in Simplification

THE uniform and simple requirements of the Commission as to bookkeeping by the interstate carriers of the country have resulted in the saving of many millions of dollars annually and make reports to the Commission an easy and satisfactory undertaking. The senator may not be aware of it, but the fact is, the system of the railroad bookkeeping now in effect is the result of conferences between the railroads and the Commission and has had and has the sanction of the former.

The senator is wrong. There has been need and there still is need for the regulatory hand of the Commission. If the urge of competition for business were given free play again, the strong would oppress the weak, favor to a quantitative shipper would again appear, and we should soon return to the chaos that existed in the year 1900 and before.

Very truly yours,
(Signed) GEORGE N. BROWN.

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Government and Business

By WILLARD M. KIPLINGER

THE OUTLOOK is for a winter of greater political nervousness than the nation has seen for several years. This refers mainly to issues in Congress, political in aspect but of very great importance to business.

At the bottom of the nervousness is uncertainty over the future course of business. This makes the Government hesitant about focusing policies which are in the air, for new policies are often disturbing. Yet the suspense itself, even without the completion of legislation and policies, contributes an element of fidgeting.

Congress is now nominally under Republican control, but the succeeding Congress of 1927-8 is apt to put the Republicans in position of responsibility without complete authority, depending, of course, on the outcome of the current elections. The uncertainty of next year communicates itself to the congressional session of this year, for what is not done now will be left over until then.

The presidential election campaigns of 1928 really start in the forthcoming session of Congress, and both parties are influenced by consideration of whether problems which might be settled now should not be put off to then, to make political credit or blame fresher for the presidential elections. This makes for uncertainty now.

Besides, ignoring partisan motives, there is a marked lack of unanimity on the principal issues awaiting determination in Washington. Disagreements on policy exist in business groups throughout the country and are merely reflected in Washington. The three outstanding problems, considered in terms of the anxiety and basic disturbance which they create, are these:

1. Agriculture, with special reference to a political remedy for the economic condition of low prices for cotton.
2. Branch banking, and continuation of the federal reserve system.
3. Tariff revision.

All three are full of dynamite. Tariff is not likely to be changed at the coming session, but there will be much talk about changing it, and this is almost as disturbing to business as real action. Agriculture needs something, but there is no agreement on what it needs; this makes uncertainty. Continuation of the federal reserve system has become an issue, some say prematurely, and business interests are worried lest failure of recharter legislation now be construed as lack of confidence in the ultimate preservation of the system.

Other pressing problems, such as tax reduction and railroad consolidation, are of great importance, but there is not the same degree of nervousness about them. Still other subjects on the political program for this winter are noisy and spectacular, but they have little immediate effect on general business. This refers to campaign contributions, foreign debts, prohibition and talk of trusts.

On the whole, it is not what is going to be done in Washington this winter that will make business nervous, but what is threatened and feared. This lack of certainty is greater than last year or the year before, and there is small consolation in the prospect that next year it will be worse.

This comes first in important problems because it threatens to make or break parties in 1928. Low-priced wheat and corn in previous years, affecting the Republican west, made agricultural relief something of a family squabble within the Republican party. Now, however, low prices hit cotton, affecting the Democratic south, and southern members of Congress are coming to Washington determined to do something about it. This makes it more of an inter-party issue.

Agriculture The only immediate political remedy for the cotton situation is some provision for financing the storage and carry-over of a surplus of the crop of this or future years, possibly by government loans. Such a plan is contained in the McNary-Haugen bill, which is still very much alive and kicking. Those who object to the equalization fee of the McNary-Haugen plan may find it necessary, in order to keep southern Democrats from uniting with western Republicans on the McNary-Haugen bill or an equivalent, to devise a separate plan for government financial aid for storage and holding. Thus it will be a nip-and-tuck fight on the question of whether the dissatisfied south shall join with the dissatisfied west. The change of only a few southern votes in the House from the vote of last session would put across the McNary-Haugen plan. I do not think this will happen, but the possibility is there.

It is notable that the necessity for limiting crop acreage is now being talked openly, whereas a few years ago it was only whispered. Some form of acreage restriction will be embodied in several bills, including the McNary-Haugen bill, and will be a principal subject of agricultural discussion. The government crop reporting system will be attacked by cotton growers' representatives in Congress on the ground that it inaccurately estimated the crop as too high and was therefore responsible for the spectacular drop in prices. The crop reporting system has withstood previous attacks of this sort, however, from interests which mistake the statement of the fact for the fact itself, and the system will persist. It is quite probable that the Secretary of Agriculture will be given authority to investigate cotton market manipulations, as he can now do in the grain markets.

Divided counsels within organized agriculture are shown by reorganization through which the National Council of Farmers Cooperative Marketing Associations is going. This is virtually a trade association of co-operatives, promising to be very influential, but internal dissension has temporarily robbed it of much of its potential influence in Washington affairs.

The deadlock over the Hull amendments to the McFadden banking bill is very tight, both as between the Senate and House and between bankers groups throughout the country. Heretofore, the McFadden measure has been regarded as a "bankers' bill." Now, however, commercial and industrial interests are being roused for it because it contains provision for extending the federal reserve system beyond 1934, when

Banking

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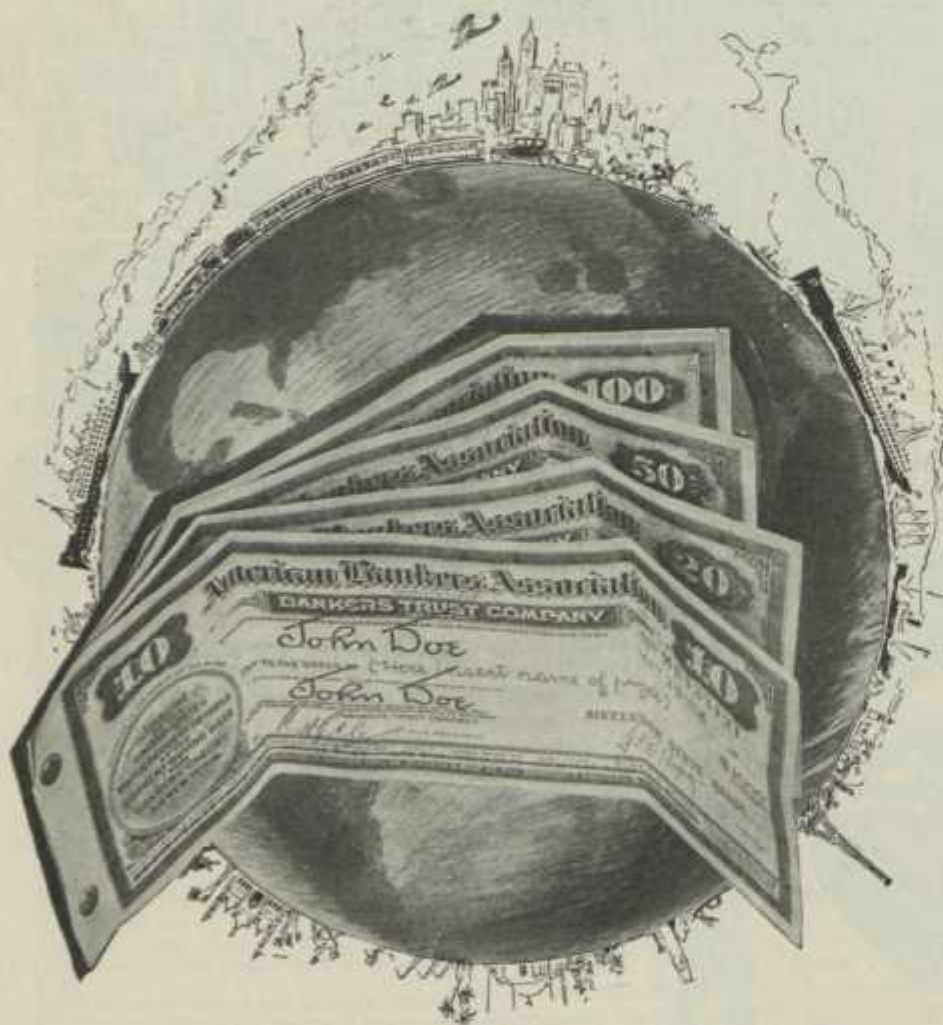
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the present life of federal reserve banks expires.

The federal reserve system is dependent directly upon the national banking system, and the national banking system needs new legislation to keep the banks from converting into state banks. Thus far, it has been largely a "banker's row" over the question of whether the extension of branch banking shall be discouraged through federal means in states where it does not now exist, but the banker's row is holding up definite decision on whether the reserve system is to be permanent. Other business interests which want the reserve system continued feel that the bankers are standing in the road.

There is no chance now of separating the federal reserve recharter provision from the McFadden bill with its controversy over the Hull amendments. The interests of the reserve banks and national banks are too closely tied up. For example, many national banks have trust powers granted by the Federal Reserve Board. If the Federal Reserve Board and system are not assured of continuity, then the stability of trust functions of national banks is threatened.

There is no assurance at the present time that the McFadden bill will pass Congress at the next session.

Many industries will have their representatives in Congress introduce bills to raise tariff schedules, and bills to lower duties

Tariff will be introduced, mainly by Democrats. There may be hearings, but there is very little chance of any final action, especially since the administration is dead set against tariff legislation now. From this process, however, industries will get a little foresight into the legislative action threatened for the 1928 session.

Tax reduction is being talked actively, but there is very little chance of any general reduction, and it seems doubtful

Taxes whether many influential business interests will demand it strongly. There will be gestures, in the form of bills for reduction of many rates, but they will not get far.

The Parker railroad consolidation bill can pass the House but will have difficulty getting through the Senate, not

Railroads because of opposition to it, but because of the jam which will be inevitable there in the latter part of the session.

Consumer interest in eastern cities will force much discussion of legislation to give the President authority to control coal distribution in strike or other

Coal emergency, and to provide for gathering of coal facts by the government, but final action is not probable.

The principal demand of the aeronautics industry is for government funds of \$5,000,000 or thereabouts for the lighting of air routes and for other phases

Aeronautics of the Government's program of assisting in the establishment of airways. Government policy is firmly set against subsidy, and will continue so.

Reductions in first, second, third and fourth class rates will be strongly urged,

but Congress probably will not get around to taking definite action by the time the session closes, except perhaps on some minor recommendations of the Post Office Department.

There is quite a growing sentiment for a congressional commission to spend a year or two considering all phases of the trust laws, and proposals for their amendment. This may develop in the coming session. It will mean the postponement of legislation, including retail price maintenance.

The Senate will ratify this after the French parliament has acted, but will not look with favor on any French reservations to the Mellon-Berenger settlement.

It seems likely that the President will construe the replies of World Court member nations as non-acceptance of the American conditions of entry and that the entire issue of American membership will remain in suspense for another year or two.

Both French debt and World Court will be made the vehicles for some bitter speeches in both Senate and House denouncing European criticisms of the United States as a "blood-sucking creditor." Anti-European sentiment in Congress is stronger now than a year ago.

There is no thought within the administration of recognizing Russia, and the widely heralded move of the Soviet to start negotiations for payment of the old Russian war debt is not likely to develop for many months.

The November session of the Senate to try Federal Judge English will not go into any other legislative matters, and, from the standpoint of business, is of little importance.

From the standpoint of the administration, there are only two "troublesome commissions," the Federal Trade Commission and the Tariff Commission. Both are in process of being reorganized, through the appointment of new members whose general policies accord with those of the administration, or who can be counted on at least to end the deadlocks of the past.

The Federal Trade Commission will continue its police work against misbranding, misleading advertising and price maintenance, and will develop the trade practice submittal work. Its investigations of trusts and combinations will be curtailed.

The Tariff Commission's work, and its relations with the administration, will receive much attention following presentation of the report of the Senate Committee which has investigated the Tariff Commission.

The Shipping Board in a series of regional conferences is trying to formulate public opinion on the future of the merchant marine, but this is not likely to crystallize into any important action at this session.

The President's Oil Conservation Board has made its report, but it contains nothing startling about which there is any great necessity for congressional action at present.

Now it's just as Strong as it Looks



Lower illustration shows pressed steel assembly of portable saw standard. This saw is used by factories, jobbing houses, contractors, schools and office buildings.

cations where copy on the old type of saw had failed to keep up the inquiry record.

Your product is different of course, but the results which pressed steel parts can secure for you in increasing sales, reducing weight, adding strength and, best of all, cutting costs may surprise you. YPS engineers are ready to work with you in redeveloping any cast part into pressed steel or redesigning your whole product so that you can benefit from the many advantages of pressed steel.

The earlier you get in touch with us the quicker will you realize these savings.

THE YOUNGSTOWN PRESSED STEEL COMPANY

Pioneers in Pressed Steel Redevelopment
Warren, Ohio

Advantage in Redesign—The example here is only one of the hundreds of pressed steel developments we have made. "Advantage in Redesign" is a booklet that relates equally remarkable instances where "pressing from steel instead" has cut costs, reduced weight, increased strength and vastly improved the character of products for almost every branch of industry. Ask your secretary to mail the coupon today.



YPS "Press it from Steel Instead"

THE YOUNGSTOWN PRESSED STEEL CO.
Warren, O.

Please send me a free copy of "Advantage in Redesign."

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Co.

Street

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State

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FOR years, the manufacturer of a portable saw used an angle iron frame, bolted together, to support the motor, saw and saw table. The assembly was strong, sturdy, rigid—but didn't look as strong as it really was. A sales resistance that had to be overcome daily was the question, "Isn't the frame too light for the work for which it is intended?"

YPS engineers studied the problem and designed pressed steel end and side panels to replace the angle frame. You can see for yourself, in the illustration above, the greater strength and neatness of the pressed steel assembly compared with the angle iron assembly. And the highly pleased manufacturer says, "As to strength, we have today a considerably stronger, safer and better looking unit than in the original construction. It is becoming of immeasurable value to us to have this made apparent." And the customer further adds that illustrations of the redesigned saw are creating new inquiries from the same publi-

Business Views in Review

By WM. BOYD CRAIG



Peace with Better Protection

Is it yours? Can you feel secure against the greatest damage of fire—the loss of your business Records?

These vitals of your business demand adequate protection. Nothing else will do. The difference in Meilink Steel Safes affords better protection. They withstand terrific heat and protect their contents after long drops and crushing loads. Frames remain square. Joints remain tight. This accounts for the Meilink record—50,000 safes and only one known loss.



Unit Equipment — the greatest exclusive feature. Fits any size business. Gives more filing space.



The most complete line of fireproof safes. Wide variety of sizes. "A" and "B" Label and lighter safes. Safes with burglar-proof chests.



"T-30" Label which allows you 10% discount on burglary insurance. Write for complete information.

Send for Catalogs.

The
Meilink Steel Safe Company
Toledo, Ohio

Better Protection
MEILINK
BUILT SAFES

TEN YEARS ago the phrase "hand to mouth" had an unpleasant connotation, suggesting shiftlessness and lack of thought for the future. Now that the phrase has been applied to the new method of buying by retailers, it has a new significance. Leaders in all lines agree that the new purchasing policy which has become nation-wide in the last year is a vital change, and should have a new name.

The Farmers' Loan and Trust Company has compiled an exhaustive survey of opinions of leaders among manufacturers, retailers, railmen, bankers, economists, and others. In the introduction to the survey, President James H. Perkins, of the bank, says that the practice of current buying will, in his opinion, prove beneficial if continued, because it is an economic stabilizer.

The views of some of those interested in economic trends having to do with production and distribution are here represented.

What Some Retailers Think

JESSE I. STRAUS, president of R. H. Macy and Company, believes that deep-rooted social changes are responsible for the revolution of the new policy. Says Mr. Straus:

"As a distributor without manufacturing experience, I hesitate even to suggest a remedy for the existing situation, which is felt so keenly by many producers. Many manufacturers can reduce the number of their lines without any material loss of good will, a policy which a distributor can less easily follow. The Hoover simplification program is an example of the large savings which can be accomplished. The manufacturer's raw material is for the most part staple. He can, in many cases, demand orders in sufficient time to permit fabrication from raw material. All too often he takes speculative chances on raw materials. If the raw material goes up in price he generally demands not only his conversion profit but also any profit which may have accrued on the raw material. If the raw material markets turn against him he demands and frequently gets a price which represents both conversion and original raw material cost. There is not enough business transacted on a straight conversion basis. But more important than these policies is a deep study of the nature and character of consumer demand. There is too much production without careful study of the probable demand.

"In our business we endeavor to anticipate as far as possible all important changes in consumer demand by careful study—in the case of style goods, by the employment of style advisors of a character different from our department managers, who are manipulators and not the choosers of merchandise. The silk industry has, I believe, for some years past shown a keen appreciation of the value of deep study leading to anticipation of demand, and some producers in that industry have provided accordingly. The announced intention of the cotton mills to study their problem through a Cotton Institute is probably a step in the right direction. I cannot regard the program of the woolen industry to scrap machinery and advertise the merits of wool as any contribution to the solution of the problems of that industry.

Study of Business Trends

"WE HAVE always endeavored to study the broad trends of business as a basis for a rational buying policy. Many types of business have made little use of the vast amount of production and distribution data now available at small cost. More careful study of fundamental business factors may serve to prevent excess production in those industries which suffer severely by ultra-conservative buying when price declines seem imminent on ac-

count of some abnormally high production."

B. H. Stenzel, secretary of the McCrory Stores Corporation, states that although their purchases are made in as small a quantity at a time as is possible in order to increase turnover and avoid leakage, yet nevertheless their aggregate purchases are large. He feels that:

"In this age of rapidly changing conditions, manufacturers must adapt themselves to circumstances the same as we have to in other conditions, and it is the far-seeing manufacturer who will prevail over others who may be slower in adapting their business to new conditions. We do not know of any standard rule by which the manufacturer of a certain article could adapt himself to a rapidly changing demand or to the 'hand-to-mouth' buying system. If we were in such manufacturers' position we would endeavor to bring our organization to the highest business state of efficiency, watch the market closely, and endeavor to give the utmost possible service to our clients. These are the general principles which should be used, and it may further be stated as a positive truism that the business which does not ultimately work for or achieve the result of giving service cannot reasonably expect to prevail in the long run. It must have a reason for existence other than merely a selfish one or it would not fit into the present scheme of things."

C. W. Patterson, the president of Austin, Nichols & Company, importers, exporters, manufacturers and wholesale distributors of food products, writes as follows:

Future Business Decreases

"I REALLY believe that the 'hand-to-mouth' proposition has come to stay and that it is the only fundamentally sound thing in business. We here, of course, in years past, have done a large future business and are still doing a big future business, but it gets smaller each year. We experience a great deal of difficulty in delivering our futures when the markets go down and we have quite a time filling orders when the markets go up.

"The manufacturers as a rule on strong markets prorrate their different packs of canned goods and merchandise. It may to some extent work hardships on the manufacturers or the canners—it will only be a financial hardship. They will have to arrange to have more capital in their business or more lenient credit lines to carry their merchandise, which is packed once a year. They are in a position to control the situation—the markets, etc.—and it is only economically fair that they should do so rather than pass this burden on to the small retailer, who only has a few thousand dollars in his business and who, through thrift and frugality, may succeed if he does not permit speculation to enter into his transactions."

Charles S. Pearce, the president of the Palmolive Company, who is a large manufacturer of soaps, cold creams, talcum powder, etc., states that it seems to him that any problems in connection with "hand-to-mouth" buying hinge on the question whether the practice is economically sound, as most problems of this character are eventually solved as a result of such a test. He states:

"It would appear that the manufacturer can hardly expect the retailer to take chances of changing styles and top-heavy inventories that he himself does not want to take.

"Perhaps a closer relation between manufacturers of kindred lines in the matter of trade practices, initiation of styles, etc., would help to stabilize conditions in each industry so that the burden may be shared and production costs kept down.

"Any attempt to promote quantity buying in order to lower manufacturing costs, unless it has a sound and logical advantage to the re-



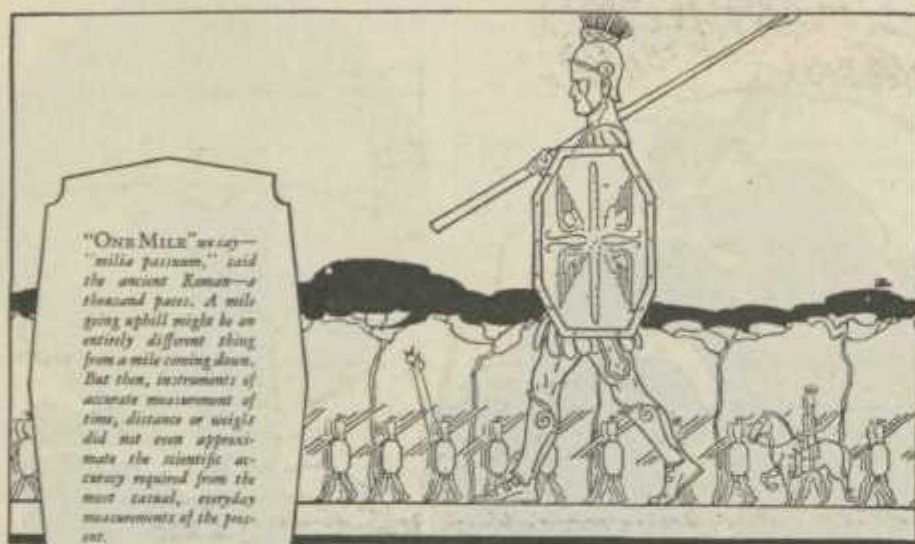
*Why forget the alarm when busy
with the bucket?*

There is a competent, well informed, willing-to-serve Hartford representative near you. Call him when you need insurance service.

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The essential of an instrument of measurement you sell is that it tell the **TRUTH**

No merchant would intentionally sell eleven eggs and tell the buyer it was a full dozen. In selling scientific instruments of measurement the obligation is just as accurate—for human life and business life in our complicated civilization of today often depend on the accuracy of the instruments with which we protect it. The developers of the thermometer were painstaking scientists satisfied with nothing but accurate truth. The men who make the discoveries of those ancient pioneers available and useful today are just as painstaking and faithful in their insistence on nothing but utter accuracy.



There is scarcely an industry in the land where some of the eight thousand styles of Tycos Instruments are not used. There is scarcely a human activity in the home, in traffic, by land and sea and air, in the hospital and laboratory, on the farm, but where Tycos is making life safer, healthier and more profitable. Such a condition implies vast responsibilities—how these responsibilities are met is indicated by the fact wherever men of medicine, of science, of industry need instruments of measurement in the control and regulation of temperature, they demand Tycos.

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THE SIXTH SENSE OF INDUSTRY

Tycos Temperature Instruments
INDICATING · RECORDING · CONTROLLING

FRINGE MARKETS

"Bus manufacturers five years ago looked upon the railroads and railways as competitors . . . Today, I understand, these markets are the primary ones for motor bus manufacturers."

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If you'd like to have us send you a copy, write for it. It's free.

NATION'S BUSINESS

Washington, D. C.

tailor, will not, in my opinion, be effective in permanently solving the manufacturer's problems.

"Past observation leads one to believe that the major portion of the readjustment must be assumed by the manufacturers, few in number in any one line, rather than the thousands of widely scattered retailers."

B. F. Jones, Jr., chairman of the board of Jones & Laughlin Steel Corporation, advises that the change in the buying methods of their customers has been very pronounced. He states that

"Today the customer is buying for his immediate wants and is, apparently, very well satisfied with the results. We have attributed this change to two factors; the first is the very much improved service which the railroads are giving, and the second is that during wartime the production was so increased in all steel lines that it is now considerably ahead of the consumption. It is our opinion that this latter condition will be overcome when the consumption catches up with the increased production. I do not know of anything that would change these conditions, as today in the steel business the market belongs, to a great extent, to the buyer and he can do about as he pleases in his purchases."

George F. Johnson, the president of the Endicott Johnson Corporation, whose large shoe manufacturing plants are located at Endicott, New York, believes that the present condition will be a permanent one and with respect to same he writes as follows:

Style Changes Increase Cost

"WE ACCEPT the situation of 'hand-to-mouth' buying (so-called), as a fact that must be reckoned with. Mass production can only be considered practical in a few 'staple shoes' sold at low prices, which do not change in style from season to season. Retailers can buy such freely. Manufacturers who supply them should feel safe in carrying such in stock."

"Style shoes demanded by the women folks, with frequent and expensive changes, limit production and increase cost, to both manufacturers and distributors."

"My opinion is—bad as is this situation—it must be met and answered. I would not expect any change. Manufacturers will have to invent new methods that will permit them to move quickly in style changes. The manufacturer who can move quickest—produce and deliver what is wanted—will be most successful."

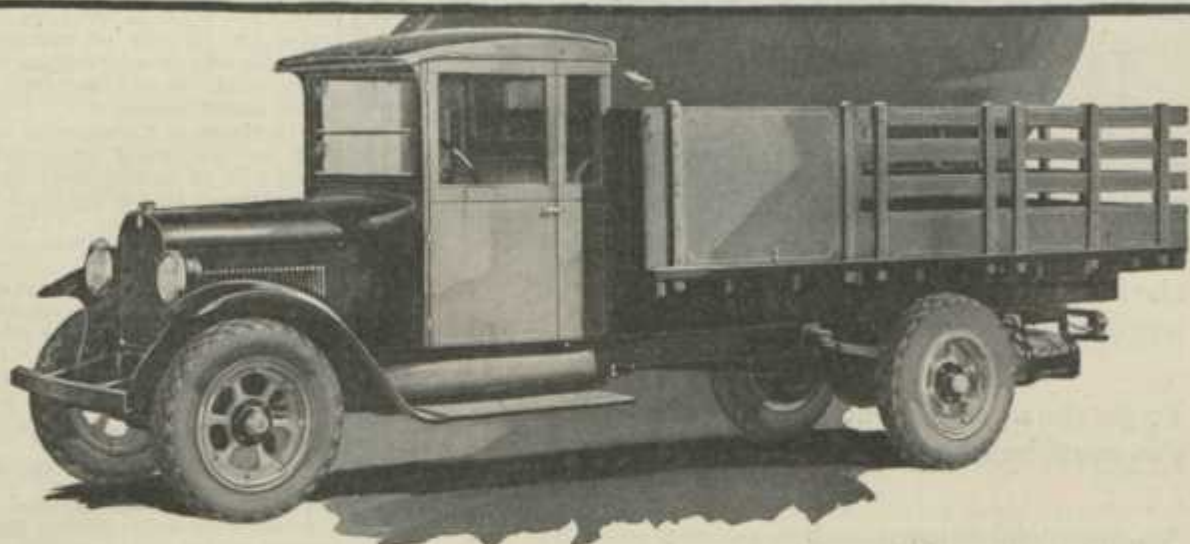
"I am urging new life—new energy—new ambition—new love for the business, and a desire to answer promptly the demands of the people for footwear, whatever these demands may be. I am not urging them to resist 'hand-to-mouth' buying, nor style changes. I am urging them to answer it in action."

Edwin S. Bayer, the president of Julius Kayser & Company, manufacturers of silk gloves, fabric gloves, silk hosiery, silk and cotton goods, dress nets and veils, states that the "hand-to-mouth" buying problem has been a continual source of perplexity to manufacturers in this country. He writes as follows:

"Personally, I cannot look forward to any important modification of the 'hand-to-mouth' buying policy as long as manufacturers continue in their practice of overproduction. Merchandise managers who control the buying of the larger department stores have been so successful with this policy that only a serious shortage of many articles of manufacture can influence them to change it. As there does not seem to be any prospect of such a shortage we must accept the present condition as a continuing fact."

William Butterworth, president of Deere & Company, one of the leading manufacturers of agricultural implements, is of the opinion that his industry has felt the effects of "hand-to-mouth" buying more than any other in the country. But, he states although such buying was justified in view of the 1921 situation, he believes that it will gradually pass away as confidence is restored. Commenting on the effect

A TWO TON TRUCK TRIUMPH



Graham Brothers new Two-Ton Truck has fairly astounded those who have tried it out—and learned its low price!

Simply another reflection of Graham Brothers policy of passing on to the buyer the vast economies of mass production.

Largest exclusive truck manufacturers in the world, Graham Brothers are in a logical position to produce trucks of outstanding performance ability at unapproachably low prices.

They did it with the famous One-Ton G-BOY. And now again with this sturdy Two-Ton!

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What Assemblyman Doe says before his State Legislature may be of importance to the people of that state, but it is scarcely a clarion call which echoes throughout the length and breadth of the land.

To get the attention and belief of the nation, you must be known by the nation.

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A NATIONAL ORGANIZATION

of the practice on the agricultural implement industry, Mr. Butterworth writes as follows:

"I do not think there is so much in the idea that on account of prompt deliveries, retailers are not buying. The fact of the matter is, when a man walks into a store he wants what he asks for while he is waiting.

"I think the 'hand-to-mouth' buying affects the manufacturers' program, but I believe, like the implement industry, they can by degrees size up the situation and eventually adapt their production program to it."

Samuel Woolner, the president of the Kelly-Springfield Tire Company, views the situation as follows:

"This practice was brought about by making it so easy for the merchants in small out-of-the-way places to obtain goods quickly, because the majority of manufacturers extend their branches to these outlying territories, carrying stocks so that the dealer could obtain goods almost overnight.

"In regard to the changing of styles: solution for that would be simplification. This could only be brought about by some governmental agency such as the Department of Commerce working together with the manufacturers and showing them the advantages of it. While I deprecate governmental interference I doubt whether the manufacturers themselves would ever get together and accomplish the desired results that could be brought about by an outside agency."

P. E. Crowley, president of the New York Central Lines, in commenting upon the problem from the standpoint of the railroads, says:

Railroads Have Better Service

"I FEEL quite sure that retail merchants are not alone in the current benefit from improved railroad service—greater punctuality and shorter time involved in transportation of goods. This must help all in proportion as they patronize the service. It seems to me that the railroads should not relax one whit in their efforts to maintain and steadily improve this quality of service in view of the intimate effect that it must have upon the amount of capital necessary to employ in a given physical volume of trade where the time the goods are in the hands of the railroads for transportation becomes a factor."

Mr. Crowley has also viewed the problem from the broader economic aspect and with respect thereto he expresses the following opinion:

"To the extent that so-called 'hand-to-mouth' buying increases turnover of merchandise in proportion to the capital employed it would seem to be a little difficult to discover the practice to be unsound. Insofar as the increased turnover in relation to capital employed develops efficiency, with consequent lower ultimate cost to the consumer, it would seem to be a favorable tendency. Perhaps the increase in buying that would result from lower manufacturing costs attendant upon a larger volume, together with more favorable credits and discounts to the trade would increase the tendency of merchants to buy and carry stocks and thus bear a larger part of the burden of employed capital. It is possible there is some psychology in the country that curtails commitments due to lack of conviction in the equilibrium of values, international relationships, tariff and labor factors, not only within some of the important commercial nations, but related one with the other. To the extent there is such psychology the only ultimate remedy is the gradual working out of the conditions to a basis that inspires greater faith."

Daniel Willard, president of the Baltimore and Ohio Railroad Company, believes that it is an undoubted fact that the railroads today as a whole are giving more prompt and dependable service than ever before, which has made it possible for purchasers and users of materials to change their methods of buying.

Eugene G. Grace, president of the Bethlehem Steel Corporation, in a recent article in

The *Saturday Evening Post*, stated that "hand-to-mouth" buying in so far as the Bethlehem Steel Company is concerned, has had a very stabilizing effect with respect to its labor situation.

It is interesting to note that Mr. Willard is of a different opinion in so far as relates to the labor situation on the railroads. Commenting upon this, Mr. Willard makes the following statement:

Seasonal Traffic Movements

"THERE is one thing that might be urged in favor of a departure from the so-called 'hand-to-mouth' method and that is the expectation that such a course would tend to stabilize labor employment, and I believe it would be helpful from that point of view. It is a fact that at certain seasons of the year the railroad facilities at least in certain parts of the country are used to the utmost because of the crop movement.

"There are seasons of the year when the coal movement is heavy, with alternate seasons when it is light. To the extent that the needs of the people for certain staple commodities could be foreseen and the transportation service in that connection performed during what might be called the periods of light traffic, such an arrangement would tend to stabilize railroad employment and it might be helpful in other directions. I have in mind particularly the anticipated requirements of coal which could be met by transporting more coal than currently needed during certain seasons of the year in anticipation of the enlarged requirements later on.

"The same thought would perhaps apply in greater or less degree to the movement of cement for road building. Other instances might be cited."

Tipton R. Snively, chairman of the Schools of Economics and Commerce of the University of Virginia, has the following comments to make:

"It would seem to appear that this condition which was at first believed to be abnormal and temporary has come to be permanent. It is my opinion that partly as a result of the improved means of transportation and communication, but especially because of the rapidity of the changes of style and custom, this practice of 'hand-to-mouth' buying is a situation that the manufacturers, jobbers and merchants cannot expect to eliminate or even to control to the same extent that they did control it prior to the World War.

Individualizing Automobiles

"AT THE present time there appears to be a conflict in many lines of industry between the tendency of standardization in production and the practice of individualizing the products by catering to a diversity of tastes. The automobile industry is a good example. While there is a marked movement toward integration into a few large concerns, at the same time the kinds and styles of cars produced are being noticeably extended.

"It seems to me that while many adjustments can be made to reduce costs and to improve conditions in the present practice of 'hand-to-mouth' buying, there are inevitable obstacles which I do not believe in the long run can be overcome. I think it desirable, therefore, that encouragement be given through proper governmental agencies such as the Department of Commerce to the larger manufacturers in many lines of industry to agree on the style and type of product to be produced at a given time. The advantages of lower costs through mass production should not be given up.

"If an agreement were made in a proper manner among a large proportion of the producers the remainder of the producing industry would be forced to follow suit. Perhaps if the men like Mr. Hoover, of the Department of Commerce, and other leaders of the country, especially the bankers, could take concerted action in the matter in some such way as has been taken by Mr. Hoover in the



C. G. Carter

whose three-cornered job as Secretary, Treasurer and Credit Manager of The Liquid Carbonic Corporation involves a great volume of correspondence, has found The Dictaphone vastly superior to shorthand.

"Instead of scribbling notes or waiting"

Here's another executive who doesn't have to wait before he can go ahead

Read why C. G. Carter declares Shorthand clumsy. Then read what the coupon offers you.

THE soda fountain! As American as Main Street. And where is there a Main Street from New York to San Francisco that hasn't its one or its scores of soda fountains? The Liquid Carbonic Corporation—largest manufacturer of soda fountains, bottler's machinery and carbonic gas in the world—does a big business in every sense of the word.

Some time ago, before the business had grown to its present proportions, C. G. Carter (Secretary, Treasurer and Credit Manager) kept two stenographers busy all the time. Today, however, despite the increasing volume of work he is called on to handle, his secretary alone takes care of his entire correspondence—thanks to The Dictaphone!

For with The Dictaphone Mr. Carter never has to interrupt work at his secretary's

desk in order to get ahead at his own. And he himself has gained as much or more freedom by adopting The Dictaphone method of handling his correspondence.

"I cannot conceive," he says, "of inconveniencing myself with a system so clumsy as shorthand, when I can have The Dictaphone. For The Dictaphone fits into my needs, instead of obliging me to fit my time and work to other people's hours, habits and convenience."

Miss Smith, his secretary, is equally enthusiastic. "I should have no time for my other work, if I had to take shorthand notes. With The Dictaphone I have at least half a day for taking care of stockholders' and dividend records and similar business."

Why is it that men who need no help from any one, in creating ideas and making decisions, still think they must have a girl with a note-book and pencil before thought can be put into action?

The coupon will put you on speaking terms with a better way.



Pearl Smith

Mr. Carter's Private Secretary, uses the time which would be wasted in shorthand, to prove her abilities in other directions.

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Secretaries say:

"He talks so fast I'll be getting writer's cramp soon."

"Hours wasted while he's in conference."

"I'm nothing but a bell-hop."

"Cold notes are maddening."

"That's enough! I'll show him this trial offer right now."

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**Hurt—as he cut across
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You pay the bill—when a child is killed or injured while playing on your property.

Paying the bill often costs \$25,000 or more—paying for an Anchor Fence instead prevents trespassing and costs but a trifle in comparison!

Our nearest office or sales agent will gladly and promptly send you full information regarding Anchor Fences and their enduring construction.

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elimination of waste in industry, some means might be discovered by which to escape the highly undesirable situation that now exists."

What Do Ethical Codes Mean? Asks "Saturday Evening Post"

ETHICS and their codification have engrossed the minds of man for some centuries. The publication of codes of ethics by individual businesses, which have been appearing for nearly a century in this country, is still a source for comment. Since the trade association, a more recent business development, began to issue quotations of its ethical standards, it in turn has been drawing its quota of comment.

The popular *Saturday Evening Post* sees little good in the statement of standards, to quote an editorial therefrom:

"It is a wholesome sign of the times that business and professional men are engaged so frequently in discussing the ethics of their particular occupations. Many trade associations, service clubs and other organizations have committees on business standards and have published codes of ethics. Lecture courses on the subject have been given at several universities, books are being written along these lines, and there are organizations which exist for no other purpose than to promote higher standards of business conduct.

"On the other hand, we fail to be overly impressed by mere organization or printed codes, standards and platforms. It has been said that the synonym for farmers' cooperation is perspiration. In the same way high standards of business conduct come only from everlasting education of the individual in his own personal morals, and not from writing down ten rules or appointing a committee. Drawing up codes has pretty nearly reached the stage of the ridiculous when clergymen talk of the necessity of having a set of moral rules for members of their profession.

"Anyone can draw up a code of ethics, but only the millennium will so purify the hearts of men that wrong will vanish from their lives. In a recent book on the ethics of business the author confines himself to the standards of conduct set forth by trade associations. He says he cannot discuss the practices of individual firms because he can't know three thousand separate industries.

"As a practical matter of book writing it may be impossible to set forth the ethical practices of three thousand industries or concerns, but that is what the public is interested in. It does not buy goods from trade associations, but from individual concerns. What really matters is not the publicly announced and purposely high-sounding and sonorous code of an impersonal association, but the actual everyday conduct of the individual business man, firm and corporation.

"We have all been led far astray in these matters, perhaps unconsciously, by the silly contention of the Socialists and their ilk that there is something inherently wrong in business conducted for profit. They say that the business system should be based on the motive of service instead of profit, as if the grocer who sells food or the tailor who makes a suit performs no service for humanity.

"The real danger that threatens modern life is the desire to get something for nothing, of not toting fair. The individual business man knows in his heart whether he is giving value received, and whether the goods he sells are honestly advertised and of quality equivalent to the price. He is either honest or dishonest about it, and that is the only code of ethics which anyone needs.

"Profits are a worthy, honorable goal, but if they are the entire, the only goal of business, then our social and industrial system is doomed. Only as more individuals think of the honest quality of the work they do will moral progress be made. If collecting the price rather than giving value received is the first consideration

of the majority of people, then committees, clubs, organizations and codes are only white-wash to cover up the rottenness beneath."

Citing an individual case where ethics played a part in business activities, the *Washington Post* has this to say:

"The traditional and long standing practice of retailing imperfect hosiery as goods of first quality has been brought to an end. Happily this reform has been accomplished by the dealers, jobbers and manufacturers themselves.

"Scarcely 15 per cent of hosiery produced in this country fails to pass inspection as first quality. Even in this 15 per cent, defects are so slight as to be nearly negligible. It is for this reason, since the housewife is hardly enough of an expert on hosiery to be able to find these small flaws, that the situation was felt to be enough of a menace to the hosiery trade to warrant an investigation.

"Under the auspices of the National Better Business Bureau a meeting of all interested persons was held last May in Atlantic City. The sense of this gathering was that the identification of the imperfect 15 per cent was necessary for the protection of the other 85 per cent, in the interest of the consuming public. Four possible designations for the imperfect goods were selected—seconds, substandards, imperfects, or irregulars. As the result of a questionnaire, approximately 75 per cent of the manufacturers of full-fashioned silk hosiery and more than 50 per cent of the manufacturers of circular-knit hosiery have chosen the word 'imperfect,' and have agreed to utilize it henceforth in their business.

"It is expected that the reform will be put into practice immediately, and that the word 'imperfect' will appear before long stamped indelibly on the toe of each piece of hosiery not of first quality."

F. T. C. Stand on Terminology A Puzzle to Lumber Industry

THE FEDERAL Trade Commission is having its troubles with lumber and its nomenclature. When is a fir not a fir? Should the buyer be aware of the fact that he is purchasing a product made from *Soymida febrifuga*, lest he think that he is purchasing *Sciocentia mahogany*? The Commission and the trade are both puzzled somewhat over the nice question of labelling.

Says *The Timberman*:

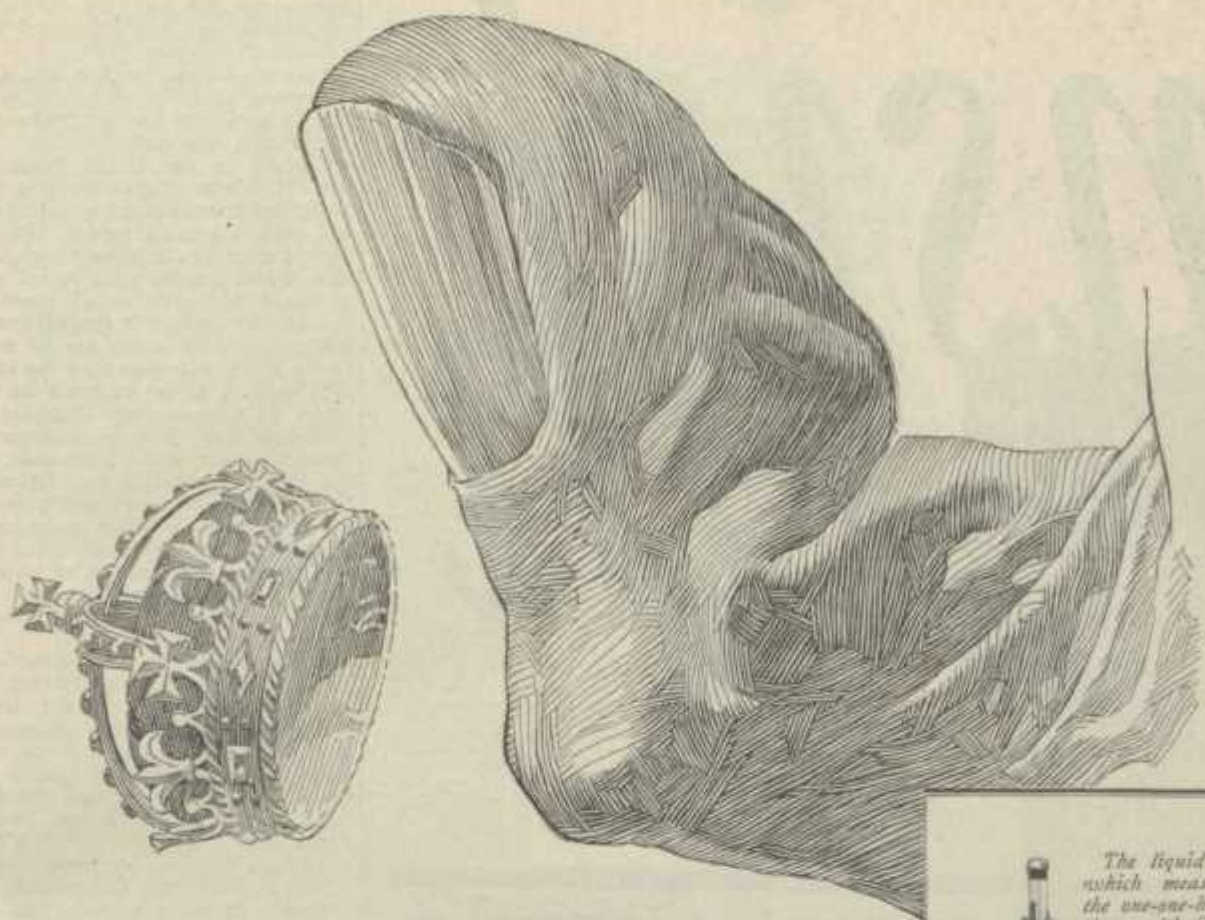
"Absurdly ludicrous" is the way Commissioner W. E. Humphrey, of the Federal Trade Commission, characterizes the decision of the majority of that body in issuing the recent 'cease and desist' order, forbidding the manufacturers of the Philippine Islands to continue marketing their product in the United States as Philippine mahogany, on the ground that the insular timbers are not botanically true mahoganies. 'The majority lay down the proposition,' continues Commissioner Humphrey, 'that the buyer must be told the truth—a perfectly correct one and one that I endorse, but when you chase this common sense idea into the clouds of scientific nomenclature, until not one person in a million, without consulting an encyclopedia, a botanist and a chemist, would know whether a word used to describe the wood in a kitchen chair is the name of a seasick remedy, a new planet, or a divorced screen star, it seems to me that the proposition in some slight degree recoils upon itself.'

"In his dissenting opinion, Commissioner Humphrey treats the whole proceeding as a colossal farce, whose delicious comedy is overshadowed only by the possible far-reaching effects of such decisions upon the names of many of our other commercial woods in common use throughout the United States, names wholly at variance with botanical interpretations. Such precedent leaves the door open to similar and equally useless attacks all along the line.

"As pointed out editorially in these columns on previous occasions, the Commission does not take into consideration the fact that the

**Anchor
Fences**

of COPPER-BEARING STEEL WIRE
GALVANIZED AFTER WEAVING

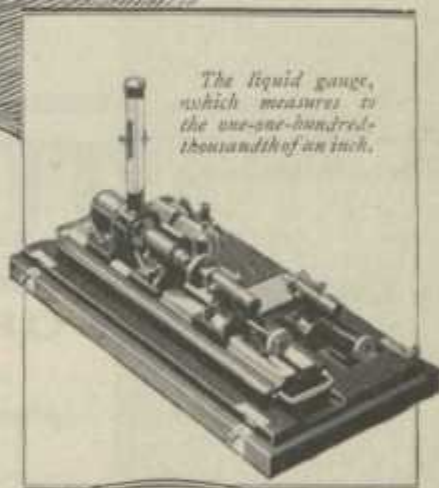


The "rule of thumb" is over. . .

KING THUMB rules no more. The rule of thumb, with all its costly guesswork, has no place in Western Electric telephone making.

Here exact measuring standards are the rule, precise in many cases to the ten-thousandth part of an inch. And this habit of being exact controls every factory activity—in the systematic planning of the great task of telephone production, in manufacturing to known standards of quality, in constantly improving methods of work—not in haphazard experiment but by scientific attack by a group of skilled industrial engineers.

At the same time, as makers of the nation's telephones, Western Electric is meeting its responsibility by holding down the cost of telephone apparatus to a figure well below the increased cost of general commodities.



The liquid gauge, which measures to the one-one-hundred-thousandth of an inch.



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public, which has been so eager to buy Philippine woods, has made no complaint and that no evidence has been introduced to show any attempt at deception.

"We are inclined to agree with Commissioner Humphrey that the only result of the order will be to deliver over, to producers of foreign mahoganies, the exclusive right to the name mahogany in the United States, where the greatest volume of their business is conducted. Philippine manufacturers operating on American soil, with American capital and transporting their lumber in American vessels, at the same time are denied the right to sell a wood that resembles mahogany in all essential respects, in their own country in competition with woods produced abroad which are no more entitled to the name mahogany than the island species.

"The 'milk in the coconut' in this controversy, as Commissioner Humphrey aptly remarks, is that Philippine mahogany, being a product of our island possessions, is admitted free of duty, and this, together with the fact that it grows in considerable bodies instead of single trees as other mahoganies, enables it to be sold in the United States at a considerably lower price than other mahoganies, and its qualities are so appealing that it is becoming a serious competitor of the Mahogany Association.

"Meanwhile the lumber industry of the entire country will await, with interest and apprehension, the decision of the United States Circuit Court, to which an appeal will be taken. If botany continues to triumph, we may yet see double-page spreads in our national magazines advertising 'Durable Pseudotsuga taxifolia' and 'Forty Year Roofs of Thuja Placata.'

And the Southern Lumberman continues:

"The Federal Trade Commission, having fired a cannon to kill a sparrow, has settled back in a glow of self-satisfaction; but there is important work yet to be done. It has rushed to the defense of the dear public and saved them from the fatal error of buying a piece of furniture made of Lauaan or Bataan under the false impression that it is made from Swietenia Mahogany. It is true that consumers may continue to buy products made of Khaya Senegalensis or Soyimida Febrifuga with the idea that they are derived from the wood of the Swietenia Mahogany; but if it is not one of these it must be clearly stated that it belongs to the dipterocarpaceae family. This is all very laudable, no doubt; at least the Commission tells us that it is an important victory, but they should not stop here. There are other similar frauds being perpetrated daily.

When Fir Is Not Fir

LET US take the case of one of our most prominent commercial woods, Douglas fir. Won't the honorable Federal Trade Commission be excited when somebody tells them that this is a bold and transparent case of mislabeling? For the botanists tell us that the only true fir is what they describe as the Abies family; and although there are some twenty-one varieties of this species, running from Abies amabilis to Abies veitchii, the name of Douglas fir is to be found nowhere in that category. On the contrary, Douglas fir is nothing more nor less than an alias for Pseudotsuga mucronata; which, being translated to ordinary language, means that it is a member of the hemlock family. Now isn't that simply dreadful?

"But we need not go so far away as the Pacific coast to find examples of this cunning deception being played upon the buyers of lumber. For years, the lumbermen of the south have been selling a product which they call yellow poplar when every botanist in the country knew that it was not a true poplar at all, neither a Populus grandidentata nor a Populus tremuloides, but nothing but a Liriodendron tulipifera or tulip-tree. Just think of the millions of feet of this magnificent wood that have been sold under such false pretenses; think of the blissful ignorance of the thousands



See How This Modern Window Blind Controls Daylight and Ventilation

WESTERN Venetian Blinds give a two-fold service which no ordinary window equipment can offer. They control the intensity and distribution of daylight, and regulate ventilation,

Note that direct rays of bright, glaring sunlight are *not* admitted; all sunlight is reflected and diffused, and is thus changed to restful, subdued daylight.

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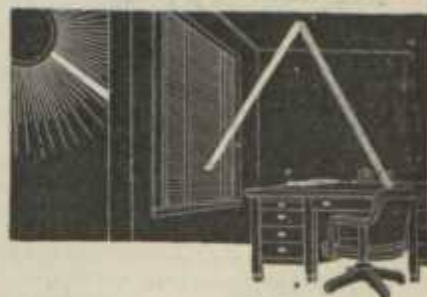
ing where it is again reflected and diffused.

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Because of this superior service, and because of actual economy, thousands of business executives now use and endorse Western Venetian Blinds.

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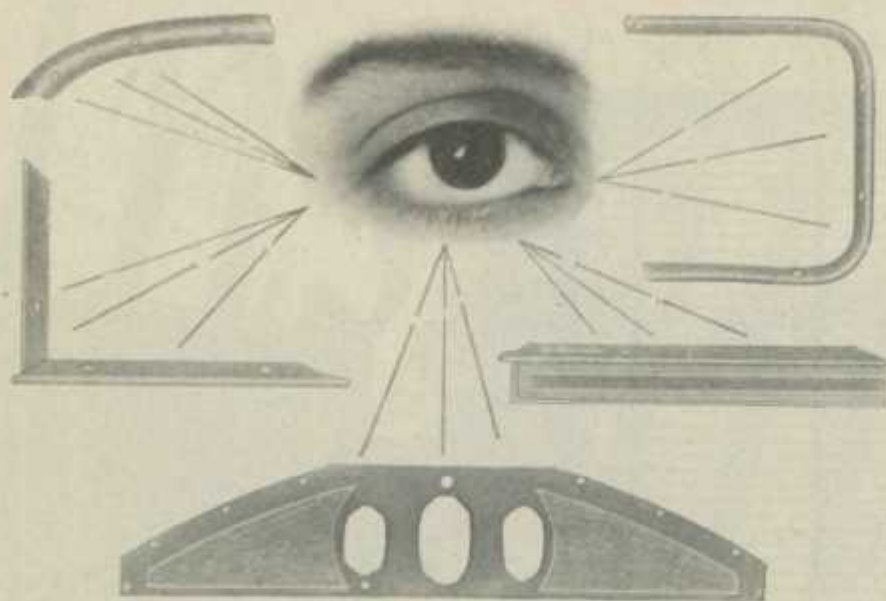
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of satisfied users who, unprotected by the Federal Trade Commission, have been buying it and happily using it, unaware of its true botanical name!

"Other similarly disgraceful misrepresentations have been practiced. It has even been whispered that the widely advertised and widely used cypress, 'the wood eternal,' is in reality a member of the Taxodium family, and is only distantly related to the botanically true cypress or Cupressus—but, strangely enough, the users of what the lumbermen call cypress have been mightily well satisfied with it and unsuspecting of any imposition on them.

"Here are grave matters demanding the attention of the Commission if it has no other windmills on which to break its quixotic lance. To be logical, it should issue one of its imperial edicts to the effect that all lumber must be sold on the basis of its botanical names. True, this would help nobody and confuse and annoy everybody; but it would be just as sensible and just as useful as its preceding action. The only real satisfaction that the citizens of the country can derive from such assiduity is that it provides additional evidence that the Commission has long outlived its usefulness."

Possible Crude Oil Shortage Discussed by Henry Doherty

OIL AND gasoline consumption means miles per gallon and resulting price to the majority of Americans, yet there are a few concerned with the more academic aspects of predicting how long the total supply—and sources will last. One of these is Henry L. Doherty, who is quoted by the *Petroleum Age* with these remarks on the state of the oil industry:

"There is no proof and little likelihood we can much longer even maintain our present rate of production.

"Pennsylvania was, for several decades, the banner oil producing state, but the demand is growing at such an alarming rate that we are already using about as much every year as the entire state of Pennsylvania has produced in sixty-seven years.

"Those who represent we have enough petroleum to supply all our needs for even the next few years are basing their representations on mere assertion and not on facts. Many of those who claim we have an abundance of petroleum do so only to prevent our government from taking action to enforce conservation and to prevent waste.

"The average man has seen wood fiber transformed into what to him is silk, and he sees no reason why some other material cannot be transformed into petroleum. Perhaps it might be possible to make some material other than petroleum into a substance that would look and feel like oil, but if the law of conservation of energy holds true, then how can we expect to take a material which contains no energy and transform it into a material having an energy of approximately one million B.t.u.'s per cubic foot? A gallon of petroleum contains upwards of energy that is equal to 20 pounds of TNT, and many people talk as though they could create this energy out of nothing.

"So long as the sun shall continue to shine we will not be without power to create all of the energy we shall need, but nobody knows what it will cost us to produce this energy.

"The earth received from the sun each year such a huge amount of energy compared with what we use that its magnitude would be difficult to state by any means whereby it could be thoroughly comprehended. The problem will be at all times simply the cost of getting energy directly from the sun or from some easier source where the cost is less.

"The sun delivers as much as 6 B.t.u. per minute per square foot of area. If this could all be recovered as power without loss it would in one minute equal all the power we now use in the United States in one year."

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THE INDUSTRIAL DIGEST, published monthly, is literally considered a textbook of development by scores of leading figures in the industrial world.

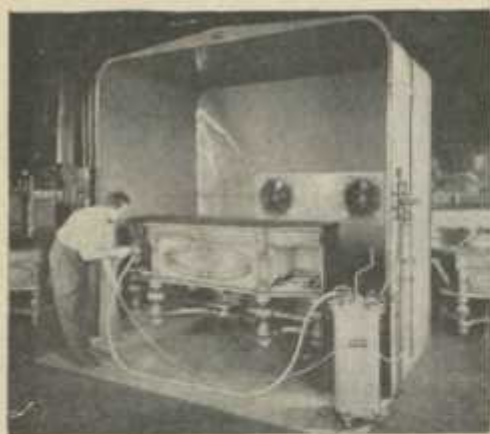
Each issue contains many articles of timely interest dealing with the problems of business and their solution. Modern industry is far too complex for any individual to watch. The Industrial Digest gives a monthly cross-section of industry, made up of the collected opinions of many industrial leaders.

In addition to a regularly contributing staff of industrial specialists, articles by well-known men, such as the following, appear regularly in The Industrial Digest: J. N. Babcock, Vice-President, Equitable Trust Company, New York; G. K. Simonds, General Manager, and John G. Thompson, Assistant to the President, Simonds Saw & Steel Company; Stephen Baker, President, Bank of Manhattan Company; Alfred P. Sloan, Jr., President, General Motors Corporation.

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A Message to Manufacturers

"I can manufacture at a profit, but my finishing costs eat up that profit, what can I do about it?"

That may or may not be your problem. Yet, many plants are applying finishes at a cost that can be reduced. The change in procedure frequently improves the quality besides. Here the recommendations of Binks Spray finishing engineers prove valuable.

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New Navy Official Talks on Aviation

EXCESSIVE stocks, the result of the immense war production, are finally being disposed of and aviation is entering the era of expansion, according to E. P. Warner, Assistant Secretary of the Navy for Aviation. In a speech before a gathering of men interested in aeronautics, Mr. Warner promised the aid of the Navy Department in the solution of the problem of airplane designing, stating that no secrets would be held back which might contribute to the advance in construction.

Aviation has had a long row to hoe. Since 1917 there have been twenty-two investigations of aeronautics. The three latest investigations, the House Committee, the Morrow and the Hoover investigations, stressed the need of encouraging commercial aviation. The Morrow Committee said, in part: "The importance of the aircraft industry in relation to national defense is obvious. The size of the air force needed in the event of a great war always will be far beyond anything that is economically feasible for any government to maintain in times of peace."

Rapid Changes in Planes

"THE rapidity of the development of the art of design, rendering flying equipment inferior for service use against a major power within a few years after design, prohibits the gradual manufacture and accumulation of material and its storage for use in any future emergency."

The passage of the Air Commerce Act in May, 1926, gave commercial aeronautics a recognized place in the field of transportation. It will go far towards encouraging the development of facilities. The act authorizes the Secretary of Commerce to encourage and control civil flying, provide navigation facilities, formulate regulations that will make for safety in flight and investigate and make public the causes of accidents in civil air navigation.

In summarizing the powers that the act gives the Secretary of Commerce, a bulletin from the Transportation and Communication Department of the National Chamber points out that he has "authority to issue regulations relative to the registration of aircraft and their rating as to airworthiness, the examination and rating of airmen as well as navigation facilities, and to establish air traffic rules for the navigation, protection and identification of aircraft."

This is undoubtedly an important point in aviation activities, but it is a mistake to view it as something apart from the past. E. P. Warner in his speech goes into history and to quote from it might give a better perspective of the industry.

We find ourselves in service aviation and its relation with the work of the Navy as a whole not at any point of sharp transition but at a position attained as the logical sequel of a long



E. P. WARNER
Assistant Secretary of the Navy

chain of events. The critical period of that development, and the word "critical" is here used with very pertinent meaning, has extended over the nine and a half years since America entered the war.

The experiences and the happenings of that time have carried certain developments of operating and procurement policy inevitably, one might even say inexorably, in their train. I need not dwell upon the record of those events here, in talking to you representatives of the industry who lived with it day by day in the making and who may say in historic phrase "all of which we saw and a large

part of which we were." I need not dwell either upon the difficulties and perplexities of the immediate post-armistice era.

Crisis at Close of War

YOU FOUND yourselves with plants prepared with unprecedented speed for unprecedented output, an output choked off in full stride. The services, on the other hand, were left loaded up with vast quantities of aircraft and accessories and supplies which were nearly or quite unused machines when the war ended and the demobilization of the armed forces and of industry began.

Manifestly that surplus equipment had to find its way into use, manifestly it was adequate to fulfill all demands for several years on the reduced scale of post-war operations. That was a situation and a problem that existed in every belligerent country with any pretensions to strength in the air.

In our own case the Navy found that problem modified by another one, for the circumstances attendant upon our naval operations during the war had been such that considerable readjustment became necessary when the work of the naval establishment had once more to be considered in its most general form and not with respect to the particular conditions that existed in the North Sea and in the Atlantic in 1918.

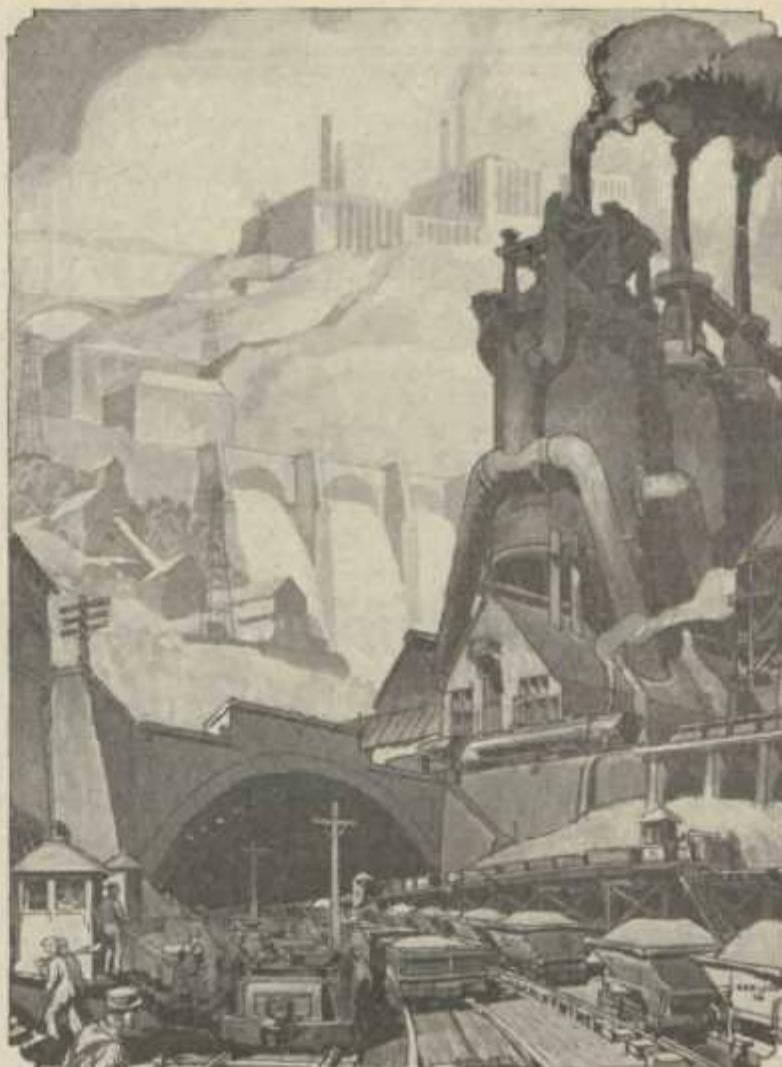
Surplus Is Decreasing

WAR-TIME design and construction, in America as elsewhere, have not entirely disappeared; but no longer can seemingly indefinite, large fresh stores of war-time equipment be brought forward, and the form of the curve that maps the rate of progress toward complete elimination of that equipment is now easy to foresee. To put it in other terms, we are approaching closely to the point where the number of service machines dating from 1918 will not exceed the quantity that might be expected to date from any one design era under the conditions of steadily continuing peace-time production.

The coming of the period of constant turnover and of a span of life for equipment predictable with reasonable accuracy to serve as a basis for that turnover is good news alike for service and industry.

In that smooth cycle of procurement for replacement there lurks potential menace of complacency. I need hardly emphasize the earnestness of the Navy's desire to guard against that and to take advantage of every bit of technical progress as it appears, while stimulating by research developments which might otherwise not appear at all.

Materials of Empire



CLIMATE and soil which yield a varied and abundant harvest—timber—rich minerals—water power—these are among the raw materials of empire in the South.

The richness and variety of nature's gifts, and the hands in which fortune has placed them, have made the growth of the South inevitable. Possessed of the best in American traditions, hard-working, homogeneous and contented, the Southern people are superimposing a new industrial empire upon a proven agricultural one, giving it rank with the most prosperous regions of the earth.

Fortunate those who share in the achievements of Southern enterprise in these eventful years.

Operating economies achieved by the Southern Railway System enabled it to operate last year on freight charges that averaged 16% lower than those of 1921. These reductions applied to last year's traffic meant a saving of \$27,000,000 to shippers on the Southern.

The Development Service of Southern Railway System, Washington, D. C., will gladly aid in securing industrial locations, farms and home sites in the South.

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RESOURCES HALF A BILLION—AND MORE

Railroads Now Use Much Less Fuel

By J. B. HILL

*President, Nashville, Chattanooga and
 St. Louis R. R.*

HAD the railroads burned as much fuel to haul each ton a mile in 1925 as they did in 1920, more than nineteen million tons of coal that are now in storage piles or in the ground would have gone up in smoke and unburned gases. Had the same rate of fuel consumption prevailed during all the years since 1920, when government operation ended, there would have been burned some fifty million tons more than has actually been consumed.

Fifty million tons of coal, if it could be piled up in one place, would be a stupendous monument to witness the fact that during the past five years there has been a genuine improvement in the railroad plant and in the methods of operating it.

That there is no real improvement in railroad efficiency, and more particularly that there is no gain in the efficiency of the steam locomotive, has for long been a cardinal point with some of our doctrinaire writers on transportation subjects. Locomotives are larger than they used to be, they will admit, but it's just the same old steam engine, they say. Wherein they convict themselves of not having really looked at a locomotive with the seeing eye since they were boys, for the steam locomotive of today doesn't even look like the iron horse of an older generation.

Bigger and Better Locomotives

LARGER locomotives, more efficient locomotives, more intensive utilization of them through better operating methods and through improved facilities of all sorts, moving heavier trains faster—these are the factors that made it possible for the railroads to handle the traffic of 1925 with 19,500,000 tons less coal than it would have taken had the fuel consumption rate of 1920 prevailed. The money saving to the railroads and ultimately, of course, to the consumers of railroad transportation, is about \$53,000,000 in 1925 alone. The saving to the economic life of the nation is even more significant.

Railroads, after all, are manufacturing plants making their own power, for the most part in relatively small, self-contained, movable power plants, and using it to produce transportation service. The power plants themselves have been so much improved of late years that in the percentage of their output of power actually translated into useful work at the draw-bar they are but little behind modern central station electric transmission systems.

To get the benefit of these improved power plants, however, they must be given heavier trains to haul and must be kept moving at a good round pace. Improvement in terminals, tracks, bridges, signals, shops and all the other things that are necessary to keep trains moving has in a measure kept pace with the improvement in locomotives. All such improvements have cost money and a lot of it, but they have been worth to the railroads and to the business of the country many times their cost.

And, finally but by no means least important, there has come a changed attitude toward fuel saving on the part of the men who

operate these traveling power plants and the small army of men alongside the tracks that are necessary to keep them moving. Fuel saving has become a hobby with many of them. I recall one fireman on the Nashville, Chattanooga & St. Louis, firing a local passenger run, who for three years now has been counting and keeping a record each day of the number of scoops of coal that it takes to get over his run. He thought he was a good fireman before. Today he is doing things in the way of fuel performance that would have been unbelievable to him three years ago.

These four factors then, better power plants, better facilities for their use, larger train loads for them to haul, and a keener and more intelligent interest in the whole subject of fuel conservation on the part of all sort of employees, have resulted in the lowest fuel consumption on record in 1925, and a record for the first six months of 1926 that is even better.

General Efficiency Raised

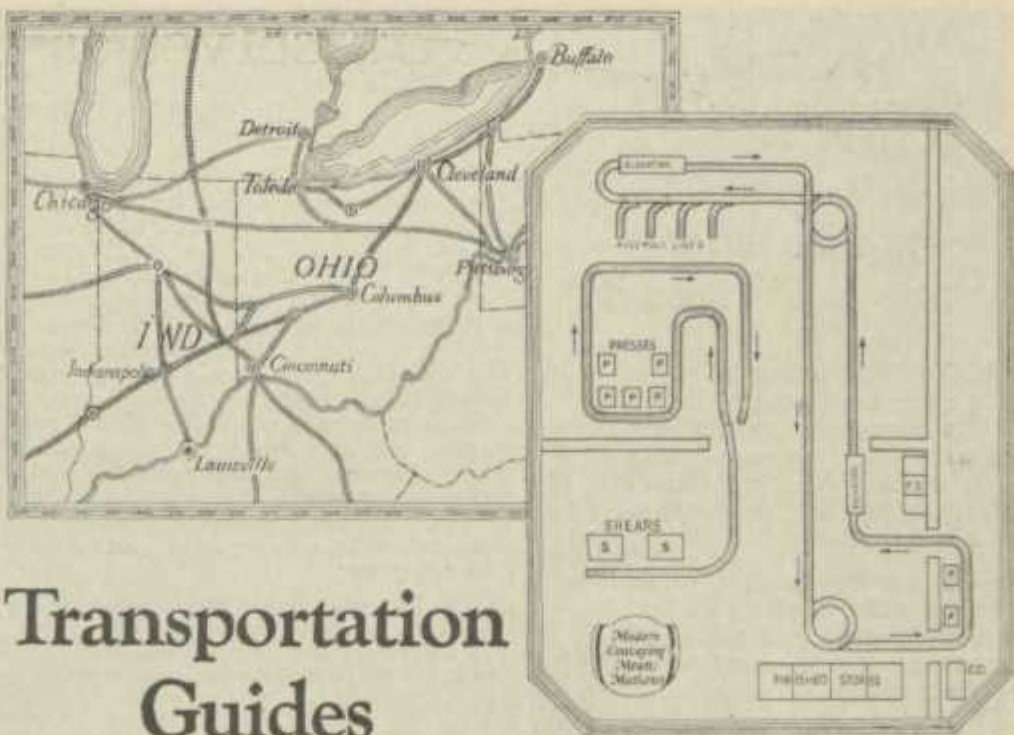
THE direct benefit to the nation through the actual saving of millions of tons of coal and the direct benefit to users of the railroads through a reduction in the roads' fuel bill, have been mentioned. There are indirect benefits not less important. Men who are trying to save coal must, of necessity, keep engines at work and keep trains moving. Engines that are easier on the coal pile are snappier in their work, quicker in getting their trains over the division. The same improvements in terminals, tracks, signals and the like which make it possible for the traveling power plants of the railroad to work more efficiently, also make it possible to get the freight over the road faster. The effects of that fact are almost a revolution in American business methods, according to the testimony of many non-railroad observers.

There is still another indirect benefit to the country, also. Railroads are making less smoke than they once did. Better engines fired better have brought that about. The fact of the matter is that railroads today are responsible for but an insignificant part of the smoke that afflicts our cities in soft coal regions.

"Smoke Nuisance" From Houses

IT IS a curious fact that so much of the uninformed popular comment on smoke in cities should center about railroad and industrial smoke. Railroads and industries make a fairly constant amount of smoke throughout the year, summer as well as winter, but the "smoke nuisance" in cities is a phenomenon of winter only. Its cause, then, must be sought in some variable factor, rather than the constantly decreasing amount of railroad smoke. Household and heating fires, which do not burn in the summer but do in the winter, are obviously one such variable factor.

Most such fires are wasteful in the extreme. There was a time, perhaps, when some railroad firemen fired the same way, back when the best fireman was the one who could shovel the most coal, raise the most black smoke and keep his safety valve "popping off" the longest. That day has gone forever on the railroads. The best fireman is the one who does the least work with his muscles throwing coal, but the most with his head, keeping a clean, bright even fire, with a minimum of smoke and unburned gases, an even steam pressure and a steady output of those transportation ton-miles that are the only things a railroad has to sell.



Transportation Guides PROSPERITY

MAKES no difference whether it's farm products to the market, commuters to their offices, or castings to sand blast. The same question of supply and demand requires that the distance and time between the two be cut to the minimum.

Mathews Conveyor Systems for your plant mean that there will be a ready and constant supply for every demand of your production schedule.

The success of the Mathews Conveyor Company has been based on the scientific use of gravity—free power—augmented where necessary by mechanical means, in the reduction of labor costs and unproductive handling time.

Let us give you specific instances of the remarkable savings effected by Mathews Equipment in industrial plants, wholesale houses, etc., similar to your own.

MATHEWS CONVEYER COMPANY, Ellwood City, Pa.

New York, Boston, Philadelphia, Buffalo, Pittsburgh, Cleveland, Detroit, Chicago, Atlanta, Anderson, S. C., New Orleans, Milwaukee, Minneapolis, St. Louis, Omaha, Denver, Salt Lake City, Los Angeles, San Francisco, Seattle. Canadian Factory: Port Hope, Ont.

MATHEWS Conveyer Systems

Increase Plant Profits

MATHEWS CONVEYER COMPANY, Ellwood City, Pa.
We are interested in mechanical handling for

You may have your representative call.

Firm

Individual

Address

N. B. 11-26

An **OK** in
RED



and the office
knows you've seen it

ALWAYS use a Blaisdell of the same color, then its mark will symbolize you and your authority. In concerns where each official adopts a different color, the handling of papers is greatly expedited.

With our free booklet, "Efficiency Uses for Colored Pencils," you can improve your office and factory practice in many unexpected ways.

Made in both regular
and thin leads

BLAISDELLS are now made in both regular and thin leads—superb leads, unmatched for firmness, brilliancy, and smooth writing. Cased in paper, Blaisdells peel in a jiffy, exposing each new point without wasting a grain of the crayon.

Your stationer sells Blaisdells in many colors. A metal device that sharpens them with a single motion is now packed with each dozen.

Blaisdell

THE PIONEER PAPER PENCIL

Send for booklet and two pencils

BLAISDELL PENCIL CO., Philadelphia, Pa.
Please send me two Blaisdells, one regular and one thin lead, and booklet, "Efficiency Uses for Colored Pencils." I enclose 10c to cover packing and postage. N1

Name _____
Street _____
City _____ State _____

The McDougal T-Square Putter
An Ideal Christmas Gift

YOU can make no finer gift to friends, clients and faithful employees—because there is no better putter made. The patented McDUGAL T Square Putter will be appreciated by golfers of any caliber.

For sale by
DEPT. N.B.

THRISTLE PUTTER CO.
461 Canal St. New York



with
Hickory Shaft
POSTPAID

Ourselves as Others See Us

By RAYMOND G. WILLOUGHBY

WORLD WITHOUT END, the economic doctors probably will get together for powwows over the fascinating state of America's "prosperity." But

Where There Is So Much, Waste Is Only Relative somehow, the business health of this nation seems to defy the inquiring probes of pun-

dits and philosophers—one group lays our wealth to high production and high wages, another to the opulence of our natural resources, and so on and so on, with considerable ingenuity and variety of assigned causes. Now "waste" is put forward in the *New Statesman* as a characteristic aspect of America's social economy. To quote from this contention:

It is continually assumed that American mass production is the concomitant of low prices, and that American prosperity is founded upon the systematic elimination of waste in indus-



try. The simple fact, of course, is that America is the land of staggeringly high prices, and of waste in the superlative degree.

North America is a continent given over to "selling." In 1850 more than 80 per cent of the adult population was engaged in productive effort and 20 per cent in selling and distribution. In 1920 these two broad classes were almost exactly equal. During the past quarter of a century salesmanship in the United States has become a national culture, and power in the community has been gathered into the hands of the go-getter, and the high-pressure artist whose craft it is to devise ever fresh means for overcoming the normal citizen's "sales resistance."

A vast combine will set out to impose a single article on a national market. It is no better than, and no different from, any other; but mass power and mass publicity will drive out its competitors. It is all part of the great mystery of mass production and mass hypnotism; mechanism without social purpose, the resounding organization of waste.

EFFORTS TO PROVIDE a counterstroke to the "Buy British Goods" campaign in the United States are proceeding, but cannot be said to have made great headway, the London *Times Trade and Engineering Supplement* concludes. According

to the article in the *Times*,

the more moderate supporters of the movement do not expect the retailer to cease importing or to discontinue advertising imported merchandise; but they urge retailers not to word advertisements in such a way as to suggest that imported articles are the better simply because they are imported.

Some manufacturers think that an intelligently discriminating attitude continually main-

tained by American buyers in favor of home industry—at least when its products are not inferior to imported competitive goods—would have a more stimulating effect on many classes of American manufacturers than an increase in the Customs tariffs on those articles. If the issue were thus narrowed to a fight on a quality basis, without the handicap of a heavy import duty, British exporters would certainly welcome the change. Yet it would not be wise to belittle the efforts of American manufacturers to persuade their fellow-citizens to buy locally produced articles in preference to imported goods.

FROM THE "thin brown golf course" atop the great dam across the Chagres River in the Canal Zone, E. Napier in the *Manchester Guardian Weekly* interprets the triumph of American resourcefulness when pitted against a tropical climate and a foreign civilization. He writes:

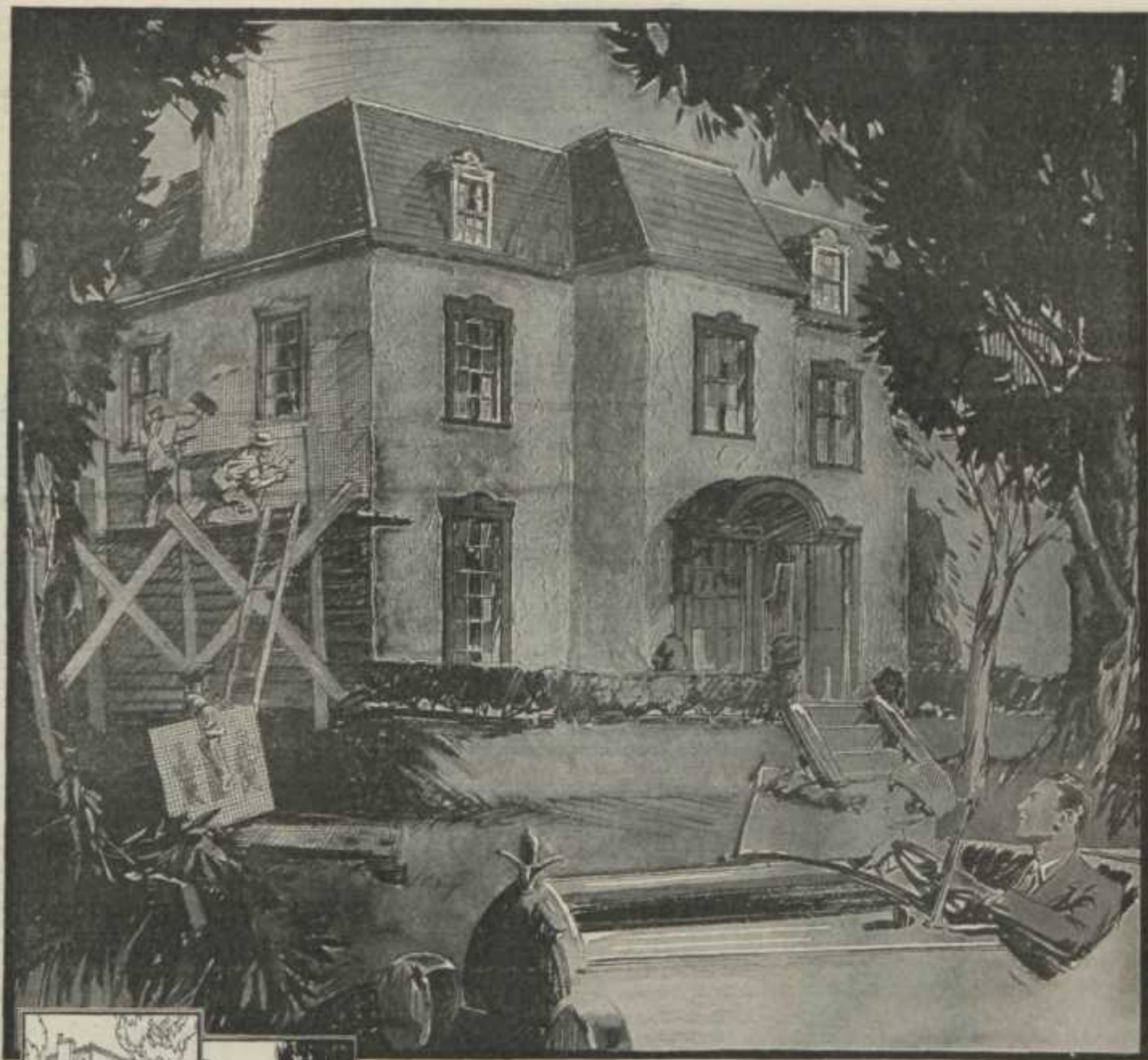
Typical, this golf course, of the efficiency of that stupendous machine which is the Canal Zone—an all-embracing efficiency shepherding every phase of the lives of those caught up in the machine, housing them, amusing them, owning them, keeping unspotted from the surrounding world of laziness and incompetence, a little strip of Babbitland, ten miles wide, in the tropics. A methodical efficiency, too, fitting always one need to another, taking dirt from the channel to fill in neighboring swamps, using overflow waters to create a supply of electricity for the Zone, letting the lock gates serve as bridges across the Canal, and making, at last, of the top of the dam, a golf course.

FOR HILARIOUS EDITORIAL ENTHUSIASMS and high revelry in extravagant word and phrase, American trade papers stand a comical first in comparison with their English contemporaries—so reads the judgment of the anonymous commentator who keeps "A Business Man's Diary" for the *Manchester Guardian Commercial*. He writes:

A friend of mine who collects American trade papers, apparently as a sort of hobby (he tells



me, by the way, that there are over 800 of them published in the States), has been showing me an assortment of photographs which he has clipped from their pages at odd times. They serve, better than anything can do, to



"Here It Is, Bob"

"This is the house I was telling you about. Mrs. Dales says this work is costing them only about as much as a few years' upkeep, and that they're financing it through their Building and Loan just as though it were a new house."

"Our house looks so shabby and old fashioned—if we replaced the awkward-looking porch and built a modern entrance, and Over-coated (as Mrs. Dales calls it) the whole house, we'd have the best looking place on The Road. It would be worth twice as much as you were offered the other day."

"Mrs. Dales says those galvanized steel wires all over the walls add strength to the house—just like wire binding around boxes or cord around a package. Besides, the

Stucco is plastered right over the wire; so that it is around all the wires, back and front—it's what they call *reinforcing* the Stucco."

"Mrs. Dales is such a thorough person—she told me that Overcoating makes a house fire-safe; that it saves fuel; that the window frames and door frames do not have to be rebuilt—I can't remember what else."

"Please, Bob, I don't want to move from The Road and leave all our old friends, and besides I'd hate to give up all our beautiful old shade—and it's just splendid for the children. Why don't you have an Architect, or Contractor, or Plasterer—or whoever does it—figure on Overcoating our house. Let's go and see about it now."

*T*ODAY, Dales' is the best looking house on The Road—and it will remain so throughout the years, because its walls are overcoated with durable Reinforced Stucco.

Throw off the burden of home ownership—the endless expense and inconvenience of upkeep and repairs. Decide to Overcoat your house—write us today (or use the coupon) for illustrated literature and complete information.



NATIONAL STEEL FABRIC
NATIONAL STEEL FABRIC COMPANY • PITTSBURGH, PA.
WORLD'S LARGEST MANUFACTURERS OF WELDED STEEL FABRIC

Use this Coupon

NATIONAL STEEL FABRIC COMPANY
722 Union Trust Bldg., Pittsburgh, Pa.

Tell me more about Overcoating.

Name _____

Address _____

City _____ State _____

reasons why you should buy a BLAW-KNOX BUILDING

- 1. Economy of the Blaw-Knox Method.** No charge for preliminary survey or building plans. Standardized stock sections permit of meeting your specifications for any one-story building.
- 2. Saving in Time of Erection.** No construction delays. Your complete building in one shipment, all parts fabricated for immediate assembly. You know the entire cost in advance.
- 3. Lowest Cost Per Year Service.** Factory made, with no waste of material or labor, insures low initial cost; and copper-bearing galvanized steel gives long life and rust protection with negligible upkeep.
- 4. Exclusive Protective Features.** No bolt or rivet holes in roof sheets—the usual starting point for rust, leaks and expense. Interlocking expansion joints throughout provide weatherproof stability under all conditions of wind and snow pressure and extreme temperature changes.
- 5. Flexibility of Construction.** No loss of value in fixed structures. Blaw-Knox buildings are permanent and, at the same time, portable. Can be taken down and re-erected or changed in shape and size as required.
- 6. Ten Years' Roof Insurance.** Blaw-Knox roofs are insured for ten years through a prominent insurance company. This is an unusual practice but one that affords you iron-clad protection.
- 7. Time-Tested Quality.** Blaw-Knox steel buildings reduce fire hazards from external sources. Their perfection of engineering detail and quality of workmanship defy comparison.

BLAW-KNOX COMPANY Pittsburgh, Pa.

632 Farmers' Bank Building

CLEVELAND
516 Union Bldg.

PHILADELPHIA
Colonial Trust Bldg.

NEW YORK

CHICAGO

BUFFALO

DETROIT

BALTIMORE

BIRMINGHAM

BLAW-KNOX COMPANY

emphasize the contrast between the average American idea of conducting a trade paper and the average English idea of doing the same. In that field we are often sedate to the point of dullness, but the American editor seems simply to revel in his job, flings all restraints to the winds, and produces a journal that comes very near in many instances to being a comic paper. Here, for example, is a photograph of a gentleman with his staff on a day's outing in the country, one of the kind that the average English editor would respectfully label "Mr. So-and-So and his staff at So-and-So." Not so the American editor. Here is his caption: "If you look closely you'll observe a guy with his collar off and shirt turned in. Well, that's Mart Buchler, who had his gang out on a little spree." A photograph of a manager, his wife and boy is inscribed "(1) Ben Holst himself, the Meal Ticket; (2) Broncho Bill, or the Big Noise of the Holst household; (3) Mrs. Holst, the Boss. Oh Ben Holst, you blueberry pie!" My comment on which would be that if Ben ever was a blueberry pie it must have been a long time ago. The French say "Les affaires sont les affaires"; Mr. Selfridge declares that business is a "great game"; some of his compatriots quite obviously regard it as the greatest joke ever.

LOWER POWER COSTS and the readiness of industrialists to accept new developments in plant equipment and new methods of production are the chief factors which have made possible the electrification of industry in the United States, in the Ruhr, and in Belgium, argues Hugh Quigley in a discussion of fuel and power, which he contributes to the *London Review of Reviews*. Of conditions affecting the development of electrical power in England he writes:

... the forces of tradition and the actual weight of the capital invested in existing plant still offer a fairly strong resistance to electrification, with the result that the degree of industrial electrification in Britain now lies between 28 per cent and 34 per cent, compared with 68 per cent in the United States, and 60 per cent in Belgium. . . .

The greatest advocates of super-power are to be found in the United States, and there is no doubt that the super-power station and the super-power zone occupy the platform at the present time. American engineers have concentrated, however, on the super-power zone, have linked up the areas of supply of important public utility companies such as the Commonwealth Edison Company, the Public Service Company of Northern Illinois, the Mississippi Power Company, the Niagara Falls Company; each of those companies has formed with surrounding companies, interconnecting main transmission lines for mutual supply and brought the super-power zone into being. . . . In this way the cost of transmission is reduced, equalization of load obtained, and the effects of breakdown in any one station neutralized.

EUROPEAN MANUFACTURERS, bankers, and economists are fairly cognizant of the fact that the United States is setting an entirely new standard in meth-

To Compete with Us Europe Must Be Single Market ods of production, in efficiency, and in low manufacturing costs, according to Walter T.

Layton, who writes in the *Manchester Guardian Weekly* on Europe and the tariff problem. His observations incline him to belief that—

For the time being America's interests are internal, thanks to her big home demand, but the German view is that before long the manufacturers of the Old World must prove their

ability to equal American standards in regard to large-scale production or must give up hope of competing in South America, the Far East, and extra-European countries generally. The reduction of costs cannot be achieved by countries which have only a small home market, and in this connection it is pointed out that America, with barely twice the population of Germany, has a real national income probably eight times as great. The Old World will only be able to compete with the New if Western Europe becomes for economic purposes a single market.

The definite schemes to which such considerations have given rise vary from suggestions for mutual reduction of tariffs by means of commercial treaties, carried out in a more vigorous way than heretofore, to the suggestion of a central European Customs Union with internal free trade.

AN INFORMATIVE FOOTNOTE to the statistics of our trade with South Africa, printed in the London *Spectator*, credits the increase of shipments

Capetown Feet
Keep Time with
Our Silk Clocks

between the two countries to the activities of trade commissioners. From the *Cape Argus*, the *Spectator* relays the news that a trade of comparatively recent development is that of the export of silk hose from America, for despite its scanty European population, South



Africa's womenfolk import more silk stockings from America than any other country except Great Britain and the Argentine.

PUBLICITY IS NO NEW ART, although in its modern aspect it is entering on great new powers, the London *Spectator* concludes in reviewing two new books on advertising. The reviewer is sure that if advertising ceased,

we would pay more for everything in common use today, and would get less value for our money. Three-quarters of our luxuries and our newspapers and our magazines (as at present produced) would vanish.

For an instance of the future of publicity, he takes the health advertisements of the Metropolitan Life Insurance Company of New York, and explains that

they publish clever dissertations on diet and hygiene, with no indication of the issuer nor any advertisement as we understand the term, beyond the president's name and the company's address in small type at the foot of the page.



Choose this *WHITE* white paint of 106 manufacturers

When you decide you want a really white house, select 40-40-20, the new outside paint now being made by 106 manufacturers. 40-40-20 is really white, brilliantly white, and it stays white as long as good paint lasts.

The large and constantly increasing number of important paint manufacturers who have applied for licenses to make 40-40-20, is indisputable proof of its excellence. These paint manufacturers are authorized by The New Jersey Zinc Company to use its registered trade mark, 40-40-20, on paint made from its specified products according to its specially developed formula. They prepare it in ready mixed form in many beautiful tints as well as in white, or in paste form for the professional painter's use.

40-40-20 does everything that any high grade outside paint will do. It brushes out easily, covers well, has great hiding power, protects the surface, withstands the weather, and leaves an excellent surface for repainting when repainting finally is necessary. Yet it costs no more than any other good paint.

The 106 authorized manufacturers of 40-40-20 have dealers all over the country who can supply you with genuine 40-40-20. Ask your paint dealer for it and send to us for the booklet "When White is White." It tells the whole story of this remarkable paint.



The New Jersey Zinc Company
160 FRONT STREET · NEW YORK CITY



They make correct posture comfortable



Number 50 Chair, illustrated at the left, and Number 10, below, are particularly adapted to office use. The Do/More line includes a chair for every use.



CONTRAST the appearance of this Do/More equip office with your own. Realize what correct posture means to the physical attitude of your employees, as well as to their mental alertness.

Do/More Health Chairs meet the demand for equipment which encourages greater individual capacity. They provide support to the weakest part of the back—making correct posture comfortable. *They brace you up.*

Do/More Health Chairs are sold and serviced exclusively by seating specialists. They are adjusted to the individual worker. Built from fine steel, durably finished, they outlast wooden furniture.

You are interested in anything that will promote better health and greater production in your organization. Let us tell you more about Do/More Health Chairs.

Write

DO/MORE CHAIR CO.,
Dept. 111,
Elkhart, Indiana.

Please send information on the relationship of seating to production.



DO/MORE HEALTH CHAIRS
they brace you up

Name _____

Address _____

Business _____

Chamber "Do's" and "Don'ts"

II—Committees

By COLVIN BROWN

Chief of Organization Service, Chamber of Commerce of U. S.

EDITOR'S NOTE—This is the second of a series of articles dealing with the every-day problems of chambers of commerce and kindred organizations.

THE CHAMBER of commerce acts through its committees. Webster defined "committee" as "one or more persons appointed or elected to attend to any matter or business referred to them"; "organization" as "the act or process of arranging or getting into proper working order"; "effective" as "having the power to cause or produce"; "work" as "effort or activity directed to some purpose or end." The definitions of these words give us an understanding of the causes of chamber of commerce success.

Standing Committees That Stand

DURING the year, we have had the usual number of standing committees and it is to be regretted that in many instances the chairmen failed to call their committees together. This condition should never obtain in a chamber of commerce, for it is not alone the emergencies that should be met. If the chamber is to maintain its leadership, committees must be standing in name only, and it is of prime importance that a chamber committee should make every effort to carry out the program assigned to it.

This paragraph was taken from the annual report of a president of a chamber of commerce, and the condition that it presents could be duplicated from cities throughout the country. Large standing committees have been found to be the bane of chamber activities. The idea is not to have every member on a committee or a committee for every member; but to have a committee for every job, whose work is defined and

whose members are discharged when the work defined is done.

It is important that the right men be selected for committee work. The selection should be based on these qualifications. A man should be interested in the particular project; he should have prestige with the members of the committee and those affected by the project; and he should have some special knowledge and experience with the problem or at least a willingness to acquire such knowledge. Some chambers have found "history cards" a help in selecting men. Each member has a file card on which is listed his business, his hobby, what committees he has served on and any other useful information. These cards are cross indexed by occupation and hobby. This enables a chamber to get men trained in certain lines; and in time, will build up a body of technical experts at the chamber's service.

Appointing Committees

THE COMMITTEE on committees is becoming more and more popular as a method of selecting committees. There are several reasons; it is natural that several men will have a wider acquaintanceship among the members than one and be more familiar with members' qualifications, and any member will regard his appointment more seriously if he knows that he has been appointed after consideration by the committee on committees. It is unwise to have the secretary select the committees though he may counsel on their appointment.

If this becomes known, it lowers the member's appreciation of the appointment, deprives the president or committee on committees of an official function usually enjoyed and throws on the secretary an unnecessary responsibility for subsequent committee success. A good make-up for the committee



A path along the Potomac at Washington

PHOTO BY DAN YUSE, WASHINGTON

When writing to Do/More Chair Co. please mention Nation's Business



POWER INTO PROFITS

Short-cuts with "Caterpillar" tractors

"Caterpillar" Tractor Prices

2-Ton . . \$1850
Peoria, Ill.

5-Ton . . \$3250
Peoria, Ill.

Thirty . . \$3000
Peoria or San Leandro

Sixty . . . \$5000
Peoria or San Leandro

Additional details
of this particular
piece of work will
be supplied to
those interested.

**Better • Quicker
Cheaper**

THIS illustration shows the laying of an electric lighting cable *without the digging of a trench!* The cable was attached to the chisel of a "subsoiler"—the sheer power of the "Caterpillar" Tractor dragged it under brick sidewalks at a tremendous saving in money and man power. Alert executives are finding new uses for the plentiful power and sure traction of "Caterpillar" Tractors.

✧ There is a "Caterpillar" Dealer near you ✧

CATERPILLAR TRACTOR CO.

Executive Offices: San Leandro, California, U. S. A.

Factories: Peoria, Illinois - San Leandro, California

New York Office: 50 Church Street

Successor to

BEST C. L. Best
Tractor Co.

The Holt Manufacturing Company **HOLT**

2 (m)

CATERPILLAR

REG. U.S. PAT. OFF.

When writing to CATERPILLAR TRACTOR CO. please mention Nation's Business



Outpost of an Army

EVEN in a land accustomed to tremendous business developments, the story of the growth of the telephone reads like a fairy tale.

Where only fifty years ago a single message was heard over a single telephone, today there are more than 73,000,000 daily conversations over a network of 54,000,000 miles of wire, connecting over 17,000,000 telephones.

In the brief span of a half century, the first telephone has developed into a national service.

The Bell System alone requires a personnel of 300,000 people, and uses plant facilities costing over \$2,600,000,000.

A nation-wide plant and nation-wide service underlie Bell System securities.

The dividend rate of the stock of A. T. & T., — parent company of the Bell System — is 4%. This investment stock can be bought in the open market to yield a good return. Write for booklet, "Some Financial Facts."



BELL TELEPHONE SECURITIES CO. Inc.

D.F. Houston, President
195 Broadway NEW YORK



"The People's
Messenger"

Ad 10

Shall We Send This Magazine to Your Home Address?

Increasing numbers of our subscribers are asking us to send NATION'S BUSINESS to their homes instead of to their offices, so that they will have it handy for leisure moments. If you want us to change your address on our records, write us, giving your present address as it appears on the slip pasted on the cover of this issue, and the new address. We shall be glad to make the change for you.

NATION'S BUSINESS
Washington, D. C.

When writing to BELL TELEPHONE SECURITIES CO., INC., please mention Nation's Business

on committees is: The president, two vice-presidents, and two last ex-presidents.

There are two kinds of committees, investigative and promotive. In the selection of the first type, it is important to get men of an inquisitive and analytical type of mind and men of varying points of view. The facts are the goal of the committee, and by packing the committee with like-minded men, it would be difficult to get all the facts. The administrative committee, however, should be picked with an altogether different point of view. This work makes it important that all its members be of one mind, all equally interested in putting over the project that the investigating committee has reported as feasible and timely. The investigative committee by having varied points of view and by being careful to get all the facts can disarm public criticism which the second committee must educate on the basis of the first committee's report.

A committee chairman must have demonstrated his ability as a leader, must have enthusiasm and interest in the work proposed, must have no personal or business connections that would be a bar to carrying forward the committee task, must have experience as a presiding officer, and must be of recognized good standing throughout the city. The committee chairman makes or breaks a committee.

Mechanical Helps to Work

VARIOUS mechanical aids have been found helpful in forwarding committee work. Special binders for each committee in which carbon copies of the minutes are kept and data for their consideration are filed are of practical necessity. It is helpful to have the chamber telephone operator call the men on the day a committee meets in addition to mailing notices. A committee bulletin board posted in a conspicuous place, containing the names of the committees, their chairmen, record of the meetings held and meetings to be held, frequently spurs the members to better work.

A committee can be very helpful to a chamber in building good will and membership. There are in every city men with ability who pay their dues and do nothing else or who are not members of the chamber. If a committee chairman, knowing one of these men's interest in a project, will go to him and ask him for advice and information, the chamber will have increased its prestige and perhaps gotten a new membership, besides having learned something.

Aristotle said that great masses of men are more easily led by personality than they are aroused by a principle. This fact makes it important that the membership be educated as to objectives and methods so that a chamber can run itself. It is, of course, easier to let one man do the work and this man is often the secretary. It is often more enjoyable for the secretary to do the work himself but it weakens the organization. When the chamber of commerce is the secretary and the secretary is the chamber of commerce, he is too much in the spotlight and gossips wag their tongues to the detriment of the chamber. If the secretary buys a new car, dues and speculation run rampant.

There should, of course, be staff assistance in the collection of material, etc., but it is important to have as many men as possible working and interested in the work.

Committee management is an art, not a science and it is, therefore, impossible to reduce it to a set of rules. Different places, different methods.



100 million feet of Southern Pine in Concrete Forms at Muscle Shoals

FOR nine-tenths of a mile across the valley of the Tennessee, the dam at Muscle Shoals towers more than a hundred feet above the workman in the river bed below.

Into forms constructed entirely of Southern Pine, have been poured a million and a quarter cubic yards of concrete.

Here, where millions of dollars are involved, where perfection only would mean future efficiency, every foot of the concrete forms was built of Southern Pine—\$000 car loads of Southern Pine.

No chances could be taken with the wood that might yield under the load, that might buckle or warp in the moisture, that could not be fabricated into forms sometimes approaching the accuracy of pattern work. Thus once again, in its hundred years of dominance as the supreme structural wood of the world, Southern Pine proved its right to that title.

In centuries to come this dominance will be unthreatened. Millions upon millions of trees grow bigger and stronger every year in the wonderful climate of the south.

The finest Southern Pine our mills ever produced is now available at any lumber yard east of the Rockies. You can tell Southern Pine by its trademark. You can judge it by its grade-mark.

Whether you plan factory, power plant or home, you should have a copy of the booklet,

Southern Pine—What It Is—What It Is Used For

This book discusses the stresses and strains to which the wood in your structure may be subjected. It recommends correct uses of Southern Pine. It is a recent publication and it is free. Send for it. Build right—and know you are right.

Special Notice—For engineers, contractors, architects and others especially interested in Southern Pine for concrete forms, a new booklet is being prepared. It will be sent, when completed, to those who ask for it.



* These letters at the right of "SFA" identify the grade. The designation here is one of 10 grade-marks appearing on lumber from Southern Pine Association mills.

Southern Pine Association

143 Interstate Building
NEW ORLEANS, LOUISIANA

Southern Pine—The Supreme Structural Wood of the World

When writing to SOUTHERN PINE ASSOCIATION please mention *Nation's Business*



ST. LOUIS

211 Different Kinds of Industries

St. Louis has factories in 211 different kinds of business. Almost every line of manufacture is represented. Only eight percent of the city's industrial force is employed in its largest branch of industry.

This wide diversity of industries acts as a constant balance and makes St. Louis strong in times of business depression. It assures stability of labor and production.

There is a westward trend of industry. Modern business is moving toward the center of the country. This has resulted in 196 new industries coming to St. Louis in the last six years. The central location of St. Louis makes it an economical distribution point. Your factory in St. Louis would have a distinct advantage over competitors not so favorably located.

Send for our booklet
"Why St. Louis Grows."
It tells the full story.

Address Dept. 31



CHAMBER OF COMMERCE
ST. LOUIS, U. S. A.

Recent Federal Trade Cases

Copies of the Commission's complaints, respondents' answers, and the Commission's orders to "cease and desist," or of dismissal may be obtained from the offices of the Federal Trade Commission, Washington, D. C., without charge by reference to the docket numbers. Transcripts of testimony may be inspected in Washington, or purchased at 25 cents a page from the official reporter, whose name is obtainable from the Commission.—Editor's Note.

VOLUME 7 of the Federal Trade Commission's study of the Grain Trade has been sent to Congress. This part of the report deals with the effects of future trading. Probably the most interesting feature of the report is the recommendation that reforms be left to those engaged in the trade. The only coercion that the Commission would use is the force of public opinion getting behind the enlightened leaders in the trade in their efforts to get reforms through the more or less inert mass of membership.

Future trading costs about \$20,000,000 a year for the Chicago Board of Trade alone, according to the report, but it is worth it. "The producers of grain, who are entitled to special consideration in this connection, would be injuriously affected, it is believed, by the sudden abolition of grain futures trading, although the gradual superseding of this and other parts of the present machinery of the grain trade by a more efficient organization is quite conceivable."

In dealing with the indirect or social costs, the Commission points out that they are extremely hard to determine, for they are due to the cost of unwise speculation in general, and to determine grain's part is a matter of considerable difficulty. At the time of the most active public interest in grain, there were not more than 11,000 active accounts on the books of the commission houses.

"The principal contributions of this volume to a greater knowledge of the effects of future trading relate to clearer distinctions regarding the nature of speculation, characteristics and difficulties of hedging practice, extent and methods of scalping, shares of speculative and other elements in future trading, extent of long and short 'open interests,' average gains and losses per bushel on trades, length of time that trades are kept open, occupations of traders, manipulative and other influences tending to artificial prices, etc." In discussing the academic argument in behalf of speculation, the report says that under existing conditions it cannot find any evidences that speculation makes prices any more or less stable. One recommendation that the report makes is that "the purely gambling element" should be eliminated from the grain market. "It is not expected that the contributions of ignorant and unwise speculators will improve the workings of a mechanism that has in large part the function of price determination." The large volume of such trading may have a stabilizing effect but it decidedly does make the market an affair of technical conditions. The report further states that "the demonstrably incompetent ought to be excluded from the market, both for the sake of themselves and for the sake of the market, but it is especially the correct functioning of the market that should be emphasized."

Another point that the Commission makes is that no matter how competent a trader is, if his methods are affecting the market unfavorably, he should be discouraged. "Margins sufficient to make it unnecessary for a trader to unload in haste should be required by rule. Substitutes for adequate margining should not be allowed. In general, the speculator should not be permitted to increase his risks out of proportion to his funds available for speculation."

The report says that commission houses should not be allowed to use one speculator's margins to finance another's trades. The report recommends that commission houses be put under some such supervision as that to which national banks are subject.

Further recommendations are that there should be regular statistical reports on the volume of open trades and possibly the limitation or, at least, the watchful supervision of large individual open accounts.

The report emphasizes the importance and necessity of the speculator in the market, the competitive freedom that hedging gives to the trade, and the place of the scalper.

THE Senate at various times has ordered the Federal Trade Commission to make reports on many different subjects. The Commission recently reported on the

PROCEEDINGS before the Federal Trade Commission, or related to its activities, for the month, are reported here. The most significant items are:

Report on future trading in grains published. Recommends that trade regulate itself.

Status of several investigations reported.

Stipulations made in regard to sale of fabric called "Sil-kee," silverware, "Havana" tobacco, and soy bean and wheat products.

Further report on the status of the furniture "trade practice submittal."

status of some of the investigations.

On February 16, 1924, the Senate directed the Commission to investigate the production, distribution, transportation, and sale of flour and bread, and related lines of business with respect to cost, price and profits, and any other evidence as to monopoly or restraint of trade. The injunction recently obtained by the Millers National Federation was requested and issued because of evidence needed in the prosecution of this investigation. On May 7, 1926, the Commission sent to the Senate a preliminary report on the flour industry in response to the above resolution.

The field investigation for the bread industry has been nearly completed.

Open Price Associations were the subject of a resolution from the Senate directing the Commission to investigate their number and importance, the effect of their activities on prices and the nature of their other activities with particular reference to alleged violations of the anti-trust laws.

Shortage of funds has made it necessary, temporarily, to materially restrict the work of this inquiry.

ON MARCH 17, 1925, the Senate directed the Commission to make an inquiry and report regarding (1) the growth and importance of cooperative associations, including comparative costs of marketing and distribution, and (2) the extent and importance of interference with an obstruction to the formation and operation of cooperative associations.

This work is actively proceeding. A series of conferences with important cooperative associations in the middle west has been held.

An inquiry into the organization and practices of certain trade associations in the lumber industry was ordered by the Commission and field work was initiated in June. Owing

The Statler Way Will Appeal To You

TYPICAL of the Statler attitude toward guests in these hotels is the fact that when you wake in the morning you find that a morning paper has been slipped noiselessly under your door while you slept.

Typical, too, is the fact that what you buy at our newsstands you buy at the same prices as you'd pay in street stores. Cigars, cigarettes, candy, newspapers, whatever, you aren't charged more for them simply because you're in a hotel. That wouldn't line up with the Statler policy of a square deal.

Those things are mentioned

to make clear the big idea under which these hotels are operated: That the guest is the man we all work for; that he has the rights and privileges of a buyer over a seller; that we promise him, and intend to give him, better values than he can get elsewhere—and prompt adjustment and

satisfaction any time we may have failed to do so and he tells us of it.

You may like to know that it is a fundamental principle of operation with us to insist that any employee serving you *must* satisfy you in the transaction—or, if he can't do so, *must* turn the matter over to his superior at once.



Emory

P. S. The experienced traveler plans his route to bring him to a Statler Hotel for over Sunday.

Rates are unusually low, in comparison with those of other first-class hotels:

Rates are from \$5 in Cleveland, Detroit and St. Louis; from \$5.50 in Buffalo, and from \$4 in New York. For two people these rooms are \$4.50 in Cleveland and St. Louis, \$5 in Detroit, \$5.50 in Buffalo, and \$6 in New York.

Twin-bed rooms (for two) are from \$5.50 in Cleveland, Detroit and St. Louis; from \$6.50 in Buffalo, and from \$7 in New York.

And remember that every room in these

houses has its own private bath, circulating ice-water, and many other conveniences that are unusual—such as, for instance, the bed-head reading lamp, the full-length mirror, the morning paper that is delivered to your room before you wake.

In each hotel is a cafeteria, or a lunch-counter, or both—in addition to its other excellent restaurants. Club breakfasts—good club breakfasts—are served in all the hotels.

Boston's Hotel Statler is Building

A new Hotel Statler is under construction in the up-town district of Boston—to be opened late this year, with 1300 rooms, 1300 baths.

And an Office Building: Adjoining the hotel will be the Statler Office Building, with 200,000 square feet of highly desirable office space. Rental Managers, W. H. Ballard Co., 45 Milk Street, Boston.

STATLER

Buffalo~Cleveland~Detroit~St. Louis

HOTELS

Hotel Pennsylvania New York

The largest hotel in the world—with 2200 rooms, 2200 baths. On 7th Ave., 52d to 53d Sts., directly opposite the Pennsylvania Station. A Statler-operated hotel, with all the comforts and conveniences of other Statlers, and with the same policies of courteous, intelligent and helpful service by all employees.

And Statler-Operated Hotel Pennsylvania~New York

Cheapest Coal

of all lake cities



35c to \$1.50 less per ton!

What would it mean to you to cut a dollar a ton off your annual coal bill? Think how that would boost your profit margin!

Erie manufacturers gain by the short haul from Pennsylvania coal fields. They also enjoy low freight rates on all-water shipments of bulk raw materials (iron ore, pulpwood, etc.). Semi-finished metal and parts are available from local and nearby sources. Here are real dollar savings in plant operation and manufacturing costs.

But low-cost coal and raw materials are only two of the many advantages Erie offers. Get the full story in detail from our big new book of vital facts, "5 Great Advantages."

Book of Reliable Facts— Free to You

Send coupon for "5 Great Advantages." 32 pages of sound facts and figures. Worth careful study by every industrial executive. Basic facts clearly presented—a true picture of the full-handed opportunities Erie offers you. Write our Industrial Board for a survey of Erie's 5-fold advantages and their application to your problems.

ERIE CHAMBER OF COMMERCE
Erie, Pa.

ERIE

PENNSYLVANIA

City of
5 great
advantages



ERIE CHAMBER OF COMMERCE
Erie, Pa.

Please send a copy of your booklet "5 Great Advantages."

Name _____

Firm _____

Address _____

NB 11-1-26

- 1 Rich Overnight Market
- 2 Swift Deliveries to Nation's Big Buyers
- 3 Raw Materials, Parts Easily Available
- 4 Steady, Intelligent, Trained Workers
- 5 Cheap Coal—Good Water

The Useful Christmas Gift for a Business Man

This Christmas you are going to give a gift to a close business friend, a business associate, an executive employee.

May we suggest a three-year \$7.50 NATION'S BUSINESS subscription. We will see that the first copy arrives during Christmas week, and if you request it we will write a special letter saying that you are the donor.

Such a gift will be used, and it has the admirable quality of coming, new each time, every month for three years.

NATION'S BUSINESS
Washington, D. C.

When writing to ERIE CHAMBER OF COMMERCE please mention Nation's Business

to a shortage of funds this work has temporarily been suspended.

Petroleum prices was the subject of a Senate resolution and an investigation was initiated. This inquiry is directed to the question of advances in petroleum prices, whether said advances are due to restraints of trade or conditions of ownership or control preventing effective competition, and to the profits of the principal companies in this industry.

THE COMMISSION releases from time to time statements of rulings where the practice complained of and found to be unlawful has been discontinued by stipulation and without the formal issuance of complaint.

The stipulations released involve the use of misleading representations, advertisements, trade names and misleading brands and labels, all of which have been condemned as unfair methods of competition by the Commission. The following stipulations involving the methods above referred to, were accepted by the Commission and the proceedings dismissed after the respondent had executed an agreement to cease and desist from the alleged unfair methods and practices with the further understanding should the unfair methods of competition ever be resumed the stipulation may be used as evidence against such respondent in a proceeding by the Commission.

Stipulation 22 was entered into with a company engaged in the sale and distribution of fabrics. On the advertisements and labels of the goods there appeared the words "sil-kee pongee" or "sil-kee," but the facts were that the fabrics did not contain silk either in whole or in part.

The respondent in Stipulation 23 sold a product that he designated by the names "Sheffield Silverware" or "Sheffield Plate." The product that he sold was not made in Sheffield, England, nor was it made in accordance with the process used in the manufacture of Sheffield nor is it of the quality associated with that grade of silverware known to the trade and purchasing public as Sheffield Silverware or Plate.

A corporation engaged in the manufacture and sale of soy bean and wheat products used the words "Importers and Manufacturers of Soy" and "Sanuki, Japan." The facts in the case were that the company did not import nor did it manufacture its products in Japan. Stipulation 24.

Stipulation 25 entered into with a manufacturer of cigars who in the course of his business brought out a cigar described and labelled as "Havana Crumbs." But the cigars were not either in whole or in part manufactured from Havana tobacco.

THE RESULTS of the conference held between representatives of the Commission and the retail furniture trade in New York City in the latter part of 1925 are encouraging. Seven hundred and ninety-six firms have now subscribed to the rules formulated at the conference. Only sixty-seven firms have refused to subscribe. The National Retail Dry Goods Association adopted a resolution approving the rules and recommended their use by members. The National Better Business Bureau announced its approval of the rules and also the fact that the rules are being followed by 75 per cent of the retailers in the cities in which local bureaus are located. The New York Daily News, after research by the Better Business Bureau, adopted definite regulations governing the acceptance of furniture advertising in line with the conference rules.

The rules that the conference adopted and which received the approval of the Commission are as follows:

Rules for the Designation of Furniture Woods:

I. Furniture in which exposed surfaces are of one wood shall be designated by the name of the wood.

II. Furniture in which the exposed surfaces are of more than one kind of wood shall be

designated by the names of the principal woods used.

Interpretation of Rules:

1. Exposed surfaces mean those parts of a piece of furniture which are exposed to view when the piece is placed in the generally accepted position for use.

2. The exposed surfaces of all furniture or parts thereof, represented as solid, shall be of solid wood of the kind or kinds designated. If veneered on the same wood, it may be designated as a wood of that particular kind. If veneered on a different wood, it shall be described as veneered.

3. Cabinet woods, used for decorative purposes where the effect is solely to add to the artistic value, shall be named as decorations only.

4. A wood popularly regarded as of lesser value, if its use is essential to construction, need not be named under Rule II, if less than a substantial amount is used on exposed surfaces.

5. A wood popularly regarded as of higher value shall not be named under Rule II, if an insubstantial amount of that wood is used, except as provided in Interpretation 3, above.

6. Designations shall be made in the caption or body of each particular description without qualification elsewhere.

7. The word "Finish" to designate color, shall be used only as a description, following the name of the wood used.

8. Where furniture is catalogued, tagged, labelled, advertised, or sold by retailers, it shall be in accordance with these rules and interpretations.

9. Where furniture is catalogued, tagged, labelled, advertised, or sold, by manufacturers, manufacturers' representatives, jobbers or wholesalers, it shall be in accordance with these rules and interpretations.

10. The above rules need not apply to antique furniture.

IN AN order issued by the Commission, a Chicago firm engaged in the business of selling watches, jewelry and other articles of merchandise by mail, is required to discontinue certain business practices found by the Commission to be unfair methods of competition.

According to the findings, the respondent caused to be printed in its catalogue many false and misleading statements. In describing jewelry, it was stated that gold and platinum with sapphires, rubies, pearls and other precious stones as trimmings, were used to make up articles whereas in fact there was no gold or platinum or other precious metal used nor were there any trimmings of sapphires, rubies, pearls or other precious stones. Similarly articles were described as being made of "art leather," "ivory" or "french ivory" when in fact no genuine leather or ivory was used.

LACE made in China or any place else but Ireland shall not be designated by the name of Irish lace according to the rulings of the Commission in a recent case. (Docket 1270.) The respondent, a New York concern, according to the findings in the case, imported lace from China which it sold to manufacturers of garments, to be used chiefly as trimmings on women's clothing, and sold it as Irish Lace. This deception, it was found, originated with the respondent and passed on by the manufacturers resulted in the finished garments being advertised as trimmed with Irish Lace, and thereby deceived the ultimate purchasers into the belief that they were buying a product trimmed with lace made in Ireland.

The findings further state that for many years lace made in Ireland has enjoyed a widespread popularity, demand and reputation among manufacturers, tradesmen, and the consuming public in the United States, and brings a price considerably higher than lace made in China. The respondent's misrepresentation of its laces, the findings conclude, are to the injury and prejudice of the public and respondent's competitors.



Amazing Lumber

[NOT CUT FROM TREES]

sets new standards of home comfort and economy

It stops heat and cold many times more effectively than wood. Cuts fuel bills by about $\frac{1}{3}$. Already used in more than 90,000 homes. . . .

AN amazing heat-stopping lumber has made house insulation practical. Architects and other building authorities urge its use. People everywhere are building with it. In five short years more than 90,000 homes have been erected this modern way.

These homes are cool in summer . . . warm in winter . . . $\frac{1}{3}$ more economical to heat. They mark a new standard of American building practice. Now that insulation has been made practical, the authorities say heat-leaking houses are fast becoming harder to sell, rent or mortgage.

This amazing lumber is Celotex. It is not cut from trees, but manufactured in broad strong

boards from the tough fibres of cane. It is stronger in walls than wood and many times more effective as insulation. Celotex is enduring . . . scientifically sterilized and waterproofed.

The demand for Celotex has been tremendous. It has increased production from 12 million square feet in 1922 to a present yearly output of over 220 million feet . . . much more than the combined production of all other manufacturers of insulation used for building purposes.

Thus Celotex takes its place as one of the country's fastest growing and soundest industries.

Complete information about Celotex may be secured by addressing The Celotex Company, 645 No. Michigan Ave., Chicago, Ill.

CELOTEX

INSULATING LUMBER



ECONOMY'S ENTERING WEDGE!

GETTING right down to the point of what economy in business actually means, these angles are obvious:

First—THE POINT OF EFFICIENCY-CONVENIENCE. Employees feel at home before Globe-Wernicke enameled steel, linoleum topped counter-height units.

Second—THE POINT OF ADJUSTABILITY. Built by units—they can be made to fit present floor restrictions.

Third—THE POINT OF FLOOR SPACE SAVING. They wedge their scientific way into economical areas.

Fourth—POINT OF TIME-THRIFT. More business can be transacted across them—with less mental and manual friction.

Fifth—POINT OF APPEARANCE. Built of steel—beautifully finished, they transform counters into "Office Furniture."

Globe-Wernicke
CINCINNATI

The Globe-Wernicke Co.,
Cincinnati, Ohio, Dept. N 11.

"What Equipment: Where Should It Go; When Should I Buy It—and Why?" Please send me a copy of the folder covering the above buying guide.

Name
Address
City State

Chips from the Editor's Work Bench

THAT Frenchman who arranged for his funeral at the going rates raises a suspicion that the cost of dying may become as altitudinous as the cost of living. "At the price the simplest funeral will have reached in twenty years," he said, "I have done a good stroke of business." Let the philosopher who can explain the conflicting evidence of this mortuary preparation for going out of business and the tenacity of interest that persists in trading in futures.

PEANUTS, graded, roasted, cleaned and shelled, produced in the United States during 1925 were valued at \$18,683,000, the diligent Census Bureau informs the world. At the national inventory two years before, the valuation was \$17,225,000. The census figures do not disclose the identity of the ultimate consumers, and it is just as well for some politicians that they don't. Even with this defect or perfection, according to the point of view, the figures may feed speculation on the amount of capital behind the political shell games that have been running during the campaigns. Still, there is plenty of proof that the views of candidates take direction from higher things. No peanut can quite fill the eye that has once looked upon the beckoning lure of a ripe political plum.

WITH the country just ready to beat its vote cultivators into carving knives or what not to loosen a slice or two of Thanksgiving white meat, it may seem irrelevant, if not irreverent, to mention the fact that the bluing works of this country, during the year 1925, manufactured products valued at \$2,167,013, a gain of more than half a million in value over the output of 1923. Although the items included in the



report do not reveal the value of the industry's by-products, certainly the national output of jazz must be closely related to the bluing industry.

With two million dollars worth of bluing available an adequate supply of bullfrog saxophones, and a bumper crop of derby hats, all the ingredients are at hand for shaking up the colorful concoctions of Whiteman, Bernie, Lopez, and the other overlords of syncopation. But with all the blowing about our bluing, and the bluing of our blowing, it is just as well to remember that the palm should go—and it regularly does—to those more useful Monday-morning laundry "blues."

IF WILL HAYS has his way, the movie industry will provide a new art preservative of other arts. In the plan he suggested to President Coolidge, the great events of the years to come would be pictured and treasured in the proposed archives building in Washington. Already there is available a considerable nucleus of films portraying historical scenes. The teaching of history with motion pictures would be wisely cal-

culated to assure an enduring interest for that subject in the schools and colleges—no longer could history be dull and lifeless, for those

... old ... far off things,
And battles long ago

would be revived at a touch to make rapt wonderment in young eyes—perhaps, old eyes, too—and some later Browning might find among the filmy substances of the departed great a modern muse to amend his poetical marveling that,

Ah, did you once see Shelley plain,
And did he stop and speak to you,
And did you speak to him again?
How strange it seems, and new!

TO AVAILABLE vocations soon may be added the career of mulekeeping, for a course in that new business is to be established in Hawaii—this on the word of James E. Coxen, director of vocational education in



that territory. Because the students will include Chinese, Japanese, Koreans, and Hawaiians, three interpreters will be needed to assist the instructor, but whether any one is to speak for the mules is not made clear. There is a vital matter that must be settled if the enrollment is not to drop off.

POLITICS has befogged the agricultural situation, declares Edward Jerome Dies in his book on "Solving the Farm Riddle." To him the activities of the "friends of the farmer" seem "a colorful pageant of tomfoolery, with the political jesters doing handspins and cartwheels, the organizers juggling gold bricks, and the cooperative lawyers shying bright banderillas at stuffed statues."

Well, the show put on by the demagogues does savor of the gaudy lures set up by the old-time circus in its quest of visiting bank-rolls. It may be that some of the political prescriptions for "agricultural relief" can justify their labels, but much more likely is the conclusion that the "relief" offered is the sort a man feels who has just been relieved of his purse. "Never give a sucker an even break" is still a first principle of confidence men and demagogues.

THOSE lectures on "better firing" arranged by the Chicago Real Estate Board for apartment house janitors promise a breathing spell for tenants there, but in other cities janitors likely will continue to lay down the law of the house with no time out for consulting the authorities.

TRAVELERS bring reports that Indian fur trappers in the valleys of British Columbia and Alaska are abandoning the canoe and the snowshoe for the motor car, a change that signifies the development of roads and the forsaking of old trails and waterways. So, another outpost of romance



When King Dealer says — "faster still!"

Disconcerting though it may be to manufacturers, the dealer is still undeniably "king" in the distribution of countless products.

Old school manufacturers scoffed at the "coddling" . . . at the "pampering" of dealers.

But in this day of "hand-to-mouth" buying, their successors have learned that . . . be it coddling or not . . . it is good business to meet the dealer's growing demand for better and faster service.

Distribution is perforce becoming decentralized. More and more manufacturers are seeing that the whole American market cannot be advantageously served without localized factories or warehouses.

That fact explains Oakland's astonishing growth.

Oakland is the "chosen city" for Pacific Coast factory branches & warehouses . . . chosen because it has every prerequisite for manufacturing, ship-

ping and marketing economy.

Oakland is closer to the whole West than any other great city. It has direct rail and water connections that save days and dollars for Western merchants and jobbers.

Buyers would rather deal with a branch factory here than with the home factory in the East or Middle West. **"F. O. B. Oakland" is a winning sales argument anywhere West of the Rockies.**

117 "national" industries already have branch factories or warehouses in this community. Abundant power, high grade labor, raw materials, concentrated markets . . . these or other advantages brought them.



This advertisement of Oakland and Alameda County, — the West's fastest growing industrial district, — is produced co-operatively by the Oakland Chamber of Commerce and the Alameda County Board of Supervisors.

An interesting little book on Oakland is yours for the asking. Or, upon request from a business executive, we will prepare a special industrial survey for any industry.

Market and Industrial Department, Oakland Chamber of Commerce

OAKLAND [AND ALAMEDA COUNTY] CALIFORNIA

"Industrial Capital of the West"



Firms with branches in Oakland realize their advantage and capitalize on it. This is an advertisement published by one of them.



Ask For It!

Associated Gas and Electric System

Founded in 1852

\$17,000,000 for New Construction

The vigor of an industry is measured to a large extent by the upkeep and enlargement of its plants and facilities.

The electric light and power industry, with a physical value estimated at \$7,500,000,000, spent during 1925 for additions and extensions approximately \$600,000,000, or 8%.

The Associated System invested during the same year \$17,000,000 in new construction and equipment, or 10.1% of the physical value of its properties. This increase is 26% greater than that for the industry as a whole.

These extensions and improvements were made in order to meet the rapidly growing demands for service. Among the chief construction activities were those in connection with the erection of transmission lines in New York State, the hydro-electric development in Pennsylvania and Maryland, and the enlargement of the electric generating and distributing capacity on Staten Island, New York City.

The Associated management endeavors at all times to furnish adequate service and to keep pace with the growing needs of the communities served.



Associated Gas and Electric Company

Write for our booklet, "Interesting Facts"

Associated Gas and Electric Securities Company

61 Broadway

New York



Other Evans-Winter-Hebb publications

Direct Advertising as preached and practiced by Evans-Winter-Hebb. A practical booklet.

Portfolio of Direct Advertising: Consisting of reproductions of typical and successful direct advertising programs.

The Three Circles: A little monthly magazine for executives interested in the use of direct advertising as a medium.

One or all sent with our compliments to executives

An advertising budget book for executives

Here is a textbook on the management of direct advertising as a guarantee of effectiveness. To executives who are determined to put their direct advertising on a profitable basis, a copy will be gladly sent free upon request. Write for your copy today.



EVANS-WINTER-HEBB Inc. Detroit

816 Hancock Avenue West

The business of the Evans-Winter-Hebb organization is the execution of direct advertising, for which it has within itself both personnel and complete facilities: Marketing Analysis, Plan, Copy, Art, Engraving, Letterpress and Offset Printing, Binding, Mailing.

When writing to ASSOCIATED GAS AND ELECTRIC COMPANY and EVANS-WINTER-HEBB, INC., please mention Nation's Business

adopts less picturesque but more profitable methods of doing its characteristic business, and modern utilities come to the hands of men near to the rim of the world. The next generation may think it nothing strange that a trapper in the far north should use an automobile to collect his catch as conveniently as the familiar postman collects parcels from the boxes along a rural mail route.

PROBABLY no steamship reservations will be canceled because of that headline, "Potato Bugs from America Menace Amity with France"—even if the dispatch does warn of another shakedown of American tourists.

NOW THAT the Pennsylvania Railroad Company has planned to provide a training school for its chefs, stewards, and waiters, dining car service may be expected to subscribe to the trend toward standardization. From Philadelphia comes word that the first of the schools will be located at Columbus, Ohio. New employees will be instructed, and men now in the service will have occasional opportunity to refresh their training. Diplomas will be given to the graduates, the company's announcement says. By this certification of training the company raises hope of a new grace in the service of dining-car meals. A touch of higher education intelligently applied may be able to make the most ordinary bill of fare seem a mesmeric bill of lading for plain and fancy stomachs in transit. That would be a smart stroke of diplomacy by any standard of railroad management.

THAT FLORIDA has an enduring faith in the homemade promotion of her resources is attested by her plans for five elaborate traveling exhibits.

These exhibits, which will be routed from Jacksonville for tours during the coming winter and next spring, are to include five trains of ten cars each.

By means of these trains the state has determined to spread its good name and fame to towns and cities far beyond its own boundaries—a campaign that seems to ask no acknowledgment of past performances; but rather serves unmistakable notice that "We have just begun to advertise."

THE INCLUSION of "charm" in the curriculum of the trade union college at Chicago provides a new standard for measuring the progress of the labor movement in America. As the college prospectus explains, "charm is much more than a mere matter of looking pleasant and eating with a fork." Quite so, and no doubt the unlisted ingredients contributed considerably to the aggressive fascination of the old-time walking delegate.

WITH considerable reason, a visitor to these shores might conclude that Americans put themselves more to the making of laws than to the loving of liberty. Our capacity for making laws is infinite and, perhaps, in that knowledge the visitor would be charitable enough to credit us with the grace of temperance.

Though Congress has been held up to public view as a horrible example of a body drunk with power, the state legislatures have also crowded their calendars with fairy-like formulas for "establishing justice, insuring domestic tranquillity, and promoting the general welfare." To believe that legislators

would fail the expectancies of powerful constituents would be thoroughly vain—where deeds are promised only acts will suffice.

In this off year, ten of the thirteen legislatures in session got 4,100 new laws through their hoppers, out-doing the output in 1924, the previous off year, by 722.

For 1925, when the mills of forty legislatures were grinding out statutes, 11,000 new laws got on the books.

Of the bills proposed in 1924, 23 per cent became laws, and on the available returns 30 per cent of the measures offered this year got by.

To define the motive forces in this kaleidoscope of laws would require a definition of the ever-changing aspects of American life—the swirling transformations in ways of living and doing that ruthlessly demand off with the old and on with the new.

Facile as the nation has been in making social, moral and economic revisions, it has at the same time developed an almost feverish zeal to mirror the new order in the statute books.

Even allowing for all "courtesy" measures that only serve to garland the egos of politicians, it is well to remember that the usual consequence of quantity production is to cheapen the product.

SO-CALLED "book trucks," operated by men who know the reading tastes of the people along their routes, are now an important and promising means of extending the service of libraries to homes remote from towns and cities. "What will you have today?" politely inquires the businesslike operator as he displays his wares—"Some nice fresh novels, a good thick biography, a few flavory short stories, or a tender piece of verse?"

The trucks are virtually sectional book cases on wheels.



If a book is requested that the operator does not have, he takes the order and mails the book on his return to the library or brings it on his next trip.

An investigation of the American Library Association has disclosed, it reports, that 45 per cent of the population of the United States and Canada is without access to libraries, the figure running up to 83 per cent for rural residents, and it regards the motor truck as a convenient utility for mobilizing this nation's store of books. Beginning in 1905 in Washington County, Maryland, this service is now effective from a considerable number of representative towns and cities, among them Greenville, South Carolina; Durham, North Carolina; Hibbing, Minnesota; St. Louis, Missouri; Logansport, Elkhart, and Rochester, Indiana; Portland, Oregon; Clarksdale, Mississippi; Birmingham, Alabama; Harrisburg, Pennsylvania; Detroit, Michigan; Evanston, Illinois, and Dayton, Ohio.

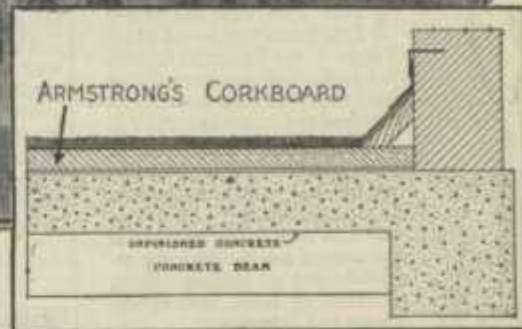
So wide an acceptance of the plan is good reason for expecting a continuous diffusion of the benefits of the familiar "circulating library." Certainly it is desirable that good books be read extensively, as well as intensively.



Hiram Sibley Building, Rochester, N. Y.

Messrs. Coolidge, Bulfinch, Shepley and Abbott, Architects, Boston.

Drawing at the right shows a typical method of insulating a concrete-slab roof-deck.



The Roof of the Sibley Building is Cork Insulated

FOR the two-fold purpose of economy and comfort, Armstrong's Corkboard Insulation was specified for the roof of the Hiram Sibley Building, Rochester, one of the handsomest business structures in central New York.

In winter the top floor will be easily and comfortably heated, and at a substantial saving in fuel, for the insulation will prevent the tremendous waste of heat that is lost through uninsulated roofs.

In summer, the top floor will be protected from the direct heat of the sun, and the offices under the roof will be as cool and comfortable as those on the floors below.

In any kind of building—office or manufacturing, public or residential—insulating the roof with Armstrong's Corkboard is the most effective means of overcoming those temperature conditions which are usually so troublesome and expensive on top floors and in single story buildings.

Armstrong's Corkboard is easily applied on any kind of roof, new or old, and its reasonable cost is more than repaid in the fuel economy of a very few years.



ARMSTRONG CORK & INSULATION COMPANY

(Division of Armstrong Cork Company)

195 Twenty-fourth Street, Pittsburgh, Pa. McGill Bldg., Montreal, Que.

Armstrong Cork Company, Ltd., Sardinia House, Kingsway,

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Branches in the Principal Cities of the United States

Armstrong's Corkboard Insulation

for the Roofs of All Kinds of Buildings

When writing to ARMSTRONG CORK & INSULATION COMPANY please mention Nation's Business

TAMPA

Florida's
Greatest
City

A Financial
Center



The sharp, climbing graph of Tampa's bank clearings makes it evident that it is the financial center of a rich new territory—Southern Florida.

THIS rich new market—Southern Florida—of which Tampa is the Financial Center, is a section whose growth has been so rapid a constant effort is required to accurately record it.

Tampa's important port, its exceptional rail and highway transportation facilities, and its location at the very hub of this vast rich new territory make it the natural selection for the establishment of selling offices, distributing bases, assembling plants and factories.

Over 500 industrial concerns with a weekly payroll exceeding \$1,000,000 have already selected Tampa because of the vital production economies due to its strategic location, but there is still room and need for many new and diversified industries.

A great deal of emphasis, for example, can be placed upon the need of a textile plant for the production of sweaters, golf vests, hosiery, and kindred products. Tampa offers unusual openings for industry of this nature.

Key City to America's New Trade Territory

A comprehensive survey of Tampa and Southern Florida will be prepared for interested executives upon request. It will be based solely upon specific up-to-date data, presented from the standpoint of your needs. Please make your request for this survey on your business stationery.

Industrial Bureau

TAMPA BOARD OF TRADE

TAMPA
Florida's Greatest City

[Listen in on WDAE—Tampa, Sunday evening between 9 and 10 o'clock (Eastern Standard Time) and enjoy an entertaining program.]

COINS

RARE COIN BOOK, 50c. Send \$2.00 for old United States coins. GUTTAG BROS., 16 Exchange Place, New York.

CALIFORNIA FACTS

(The Statistical Magazine)

ALL ABOUT CALIFORNIA OPPORTUNITIES AUTHORITY, unbiased "Facts Only" concerning FINANCIAL, Industrial, Commercial & Agricultural CALIFORNIA. Get yours while they last. Mail name with 25c coin to "California Facts," P.O. Drawer H.1, Hollywood Station, Los Angeles, Calif.

Reviews of Recent Business Books

Airmen and Aircraft, by Henry H. Arnold. The Ronald Press Company, New York, N. Y., 1926. \$3.50.

This new volume of the Ronald Aeronautic Library by Major Arnold of the U. S. Army Air Service is an introduction to aviation which will be interesting not only to those who expect to study the technicalities of aviation for a life work but also to those who seek the subject for entertainment.

Aviation has come to be a highly technical subject and the literature is usually much beyond the average reader. An introduction to aeronautics is, therefore, particularly opportune.

"Airmen and Aircraft" contains nontechnical descriptions of modern types of aircraft and explains simply how an airplane overcomes the force of gravity.

The volume gives a brief account of the history of aeronautics. The explanation of the simple principles of aeronautics is followed by a brief but interesting account of some of the famous exploits of fliers in the World War and of the history-making flights since the war.

The appendices give aeronautic nomenclature, qualifications for air pilots, and the courses of flying instruction of the Army and Navy.

Scientific Foundations of Business Administration, edited by Henry C. Metcalf. The Williams & Wilkins Company, Baltimore, Md., 1926. \$5.00.

The Bureau of Personnel Administration during the winter of 1924-25 conducted a course on the "Scientific Foundations of Business Administration," which is now published as an "attempt to analyze the philosophical, biological, economic, psychological foundations of business administration and its basic administration principles; and to apply them to practical business affairs."

The publication of the 1923-24 course, "Linking Science and Industry," showed that there was a demand for this sort of thing. The publication of the course of 1924-25 is intended as a companion volume to the earlier publication.

Distribution of Textiles, Bulletin No. 56, Bureau of Business Research, Harvard University, Cambridge, Mass., 1926.

This report by the Bureau of Business Research, Harvard University, is a study of the distribution of textiles—cotton manufacturers, converters, woolen and worsted manufacturers, rug and carpet manufacturers, silk manufactur-



The Washington residence of Secretary of State Frank B. Kellogg, 1701 Nineteenth Street N.W. His home, or voting residence, is St. Paul, Minn. From time to time pictures of the homes of other cabinet members will appear in NATION'S BUSINESS.

When writing to the above advertisers please mention Nation's Business

"The Department Store of Newspapers" makes more than a 2^{to}1 Gain



Total Department Store Advertising in Chicago from January 1 to August 31, 1926

IN "THE LOOP"

	The Daily News		Tribune		Herald Examiner		Post	Advertiser	Journal	Total	Percentage in The Daily News
	Daily	Sunday	Daily	Sunday	Daily	Sunday					
Boston Store	467,671	2,918	309,761	26,596	192,170	6,711	193,029	222,161	1,325,567	35.78	
Carson Pirie Scott & Co.	278,673	359,936	.....	116,336	.....	93,396	118,196	47,567	1,012,520	27.44
The Fair	513,679	61,968	299,774	7,998	162,796	24,963	246,148	47,040	1,371,400	36.05	
Marshall Field & Co.	356,278	349,167	.....	224,811	.....	212,251	252,036	222,582	1,629,424	22.80
Hillman's	354,462	5,021	195,587	2,400	88,744	.....	14,619	.....	591,943	59.89
Leiter Building Stores	277,534	4,163	182,247	3,196	102,980	134	90,653	139	690,940	41.29	
Mandel Brothers	258,152	264,488	173,629	20,401	71,451	86,511	49,367	112,351	1,046,520	27.53	
Chas. A. Stevens & Bros.	39,953	172,999	71,041	.....	.....	5,433	18,172	.....	307,598	12.89
The Davis Company	853,634	136,243	.....	97,734	.....	19,994	348,648	106,361	1,560,214	54.47
Total Agate Lines	3,448,636	1,356,513	1,092,239	900,706	568,805	427,093	1,333,169	758,500	8,507,061	35.28	

The Daily News Printed 3,299,527 more lines than the highest morning paper.
 2,118,867 more lines than the next highest evening paper.
 865,284 more lines than the next daily and Sunday paper combined.

OUTSIDE "THE LOOP"

	The Daily News		Tribune		Herald Examiner		Post	Advertiser	Journal	Total	Percentage in The Daily News
	Daily	Sunday	Daily	Sunday	Daily	Sunday					
W. A. Witzoldt & Co.	370,428	11,423	82,238	25,015	44,702	1,130	153,435	.....	687,342	53.90
Becker-Byron & Co.	65,077	.....	24,147	.....	.....	.....	722	.....	91,071	71.45
Corrydon's	43,221	.....	.....	.....	.....	.....	.....	.....	43,221	100.00
E. Iverson & Co.	88,238	.....	.....	.....	.....	11,421	.....	.....	100,647	88.65
Klein Bros.	45,651	.....	810	.....	.....	.....	35,848	.....	84,507	56.84
L. Klein	129,949	610	21,871	.....	.....	.....	1,270	.....	153,700	84.55
Loess Miller & Co.	20,067	1,859	7,930	16,867	.....	.....	6,502	.....	53,054	37.86
Strova's	23,881	.....	.....	.....	.....	.....	.....	2,440	26,321	90.73
The 12th St. Store	128,447	.....	18,938	.....	.....	.....	.....	85,400	233,785	55.37
Montgomery Ward & Co.	5,762	4,925	25,791	.....	23,410	.....	35,632	13,935	109,453	3.26
Madigan Brothers	13,760	1,941	38,408	.....	.....	.....	.....	.....	54,109	25.43
Seers, Ruckelsh & Co.	84,245	369	53,117	972	36,054	228	54,889	12,572	236,756	35.58	
Goldblatt Bros.	308	.....	.....	.....	.....	.....	.....	.....	308	100.00
Larkin Store	850	150	628	150	.....	.....	152	.....	1,830	44.04
Total Agate Lines	1,024,292	21,075	273,686	43,004	116,737	228	288,456	114,647	1,876,109	54.40	

The Daily News Printed 981,239 more lines than the highest morning paper.
 112,634 more lines than the next highest evening paper.
 112,629 more lines than the highest daily and Sunday paper combined.

TOTAL IN AND OUTSIDE "THE LOOP"

	The Daily News	Tribune		Herald Examiner		Post	Advertiser	Journal	Total	Percentage in The Daily News
		Daily	Sunday	Daily	Sunday					
Total in "The Loop"	3,448,636	1,356,513	1,092,239	900,706	568,805	427,093	1,333,169	758,500	9,507,061	36.28
Total Outside "The Loop" . .	1,024,292	21,075	273,686	43,004	116,737	228	288,456	114,647	1,876,109	54.60
Total of All Dept. Stores . . .	4,472,928	1,377,588	1,365,925	943,710	685,542	655	1,621,625	873,147	11,383,170	39.30

The Daily News Printed 3,665,746 more lines than the highest morning paper.
 2,662,551 more lines than the next evening paper.
 1,377,513 more lines than the highest daily and Sunday paper combined.

Member of The 100,000
Group of American
Cities

ALTHOUGH now carrying a volume of department store advertising exceeding the combined total of the next four daily papers, The Chicago Daily News in the first eight months of 1926 gained 394,351 agate lines of department store advertising over the corresponding period of last year.

The nearest morning paper gained 132,823 agate lines.

The next evening paper lost 278,677 agate lines. This remarkable demonstration of the results being obtained by Chicago's leading merchants through the superior selling power of Chicago Daily News

advertising again presents to ALL advertisers the best possible information to guide their selection of a medium in Chicago.

To Chicago people—and to advertisers—The Daily News is "the department store of newspapers." It provides for each member of the family, and for every type of reader, the news, special articles and features that suit them best. It gives them the most comprehensive display of "advertising news" available. To advertisers it affords a vantage place in the market. How the Chicago department stores place their advertising is shown in the above tabulation.

THE CHICAGO DAILY NEWS

First in Chicago

Advertising
Representatives:

NEW YORK
J. B. Woodward
118 E. 42d St.

CHICAGO
Woodward & Kelly
360 N. Michigan Ave.

DETROIT
Woodward & Kelly
Fine Arts Building

SAN FRANCISCO
C. Geo. Krogness
253 First Nat'l Bank Bldg.

When writing to THE CHICAGO DAILY NEWS please mention Nation's Business

What would you like to know about— Oakland ?

Probably you agree with most business men of the East and Middle West—that on the Pacific Coast "Oakland is the place to start".

If you are studying this community's advantages with the thought of locating your Western factory branch here, we can be of material assistance to you.

We know this city and its environment. We can answer the questions you would like to ask. And our answers will reflect our fifty-nine years of banking and business experience.

Your inquiries will
be accurately and con-
fidentially handled

The Oakland Bank

12th and Broadway, Oakland, Calif.

48-1125

"The Sunshine Belt to the Orient"



\$750

Hawaii-Japan-China and return

A GLORIOUS trip to the Orient. Bothways aboard palatial President Liners.

From San Francisco to Honolulu, Yokohama, Kobe, Shanghai, Hong Kong and return the same route. Or return via the Admiral Oriental Line direct from Japan to Seattle.

Roundtrip fare includes meals and accommodations aboard ship. Outside rooms. A world famous cuisine.

Dollar Steamship Line

Robert Dollar Building, San Francisco
604 Fifth Avenue, New York

ers, wholesalers and jobbers dealing in textiles, and piece goods importers.

"This survey of the distribution of woven textile fabrics was undertaken at the request of men engaged in the textile industry, and the funds for carrying it on were provided by an anonymous gift."

The survey should help to stabilize the harassed textile industry.

Bothering Business, by H. A. Touminin, Jr. B. C. Forbes Publishing Company, Inc., New York, N. Y., 1925.

A 60-page booklet on the Federal Trade Commission and a few other "bothering" governmental activities.

Theory and Practice of Advertising, by S. Roland Hall. McGraw-Hill Book Company, Inc., New York, N. Y., 1926.

Advertising, as the specialized profession which it has come to be because of mass production and mass selling, needs well-trained men and women to fill its ranks. By "Theory and Practice of Advertising" Mr. Hall, who has had much advertising experience, endeavors to fill the needs of a text for students of colleges and universities.

A few of the subjects treated are: Names, Slogans, Trade-marks, Psychology of Advertising, Copy for Advertisements, Layouts for Advertisements, Mail-order and Direct Advertising, and The Advertising Agency and Its Work.

Agricultural Journalism, by Nelson Antrim Crawford and Charles Elkins Rogers. Alfred A. Knopf, New York, N. Y., 1926.

Farmers have the habit of reading. They usually subscribe to a farm journal, a newspaper and perhaps a magazine or so.

In order to write successfully for the farmers, farm journalists must understand the farmer's psychology which, because of his life and work, is different from that of city office workers.

"Agricultural Journalism" is a textbook on journalism as adapted to the need of writers for farmers.

Depreciation in Public Utilities, by Delos F. Wilcox. National Municipal League, New York, N. Y., 1925.

Depreciation is an important element in the operation of all public utilities, but there is a wide difference of opinion among engineers and experts as to the ways of treating it.

Dr. Wilcox, who has been active on the Public Service Commission of New York State, discusses "accrued depreciation" and its relation to replacements and maintenance.

To substantiate his position, he has summarized the experience of a number of municipal railway systems.

Profits, Dividends and the Law, by Prosper Reiter, Jr. The Ronald Press Company, New York, N. Y., 1926. \$4.50.

The author's main object in this volume is to classify the labyrinth of laws and court decisions on the subject of corporation dividends by an analysis of statutes and cases.

"Profits, Dividends and the Law" begins with a discussion of fundamental accounting concepts and a study of the English law and a few cases in which American corporation laws and decisions have their bases.

The second part of the book discusses the liability of stockholders and directors where corporate funds have been used with detriment to creditors. The author shows that before a profit is available for dividends, such factors as depreciation, depletion, and realized changes in value of investment must be allowed for.

Today and Tomorrow, by Henry Ford in collaboration with Samuel Crowther. Doubleday Page and Company, New York, 1926. \$3.50.

Everyone should know by this time that true

GROUP LIFE INSURANCE

What Are You Doing About It?

Over 9,000 employers of the U. S. A. carry Group Insurance on the lives of 3,000,000 employees.

It covers groups of employees under one policy without medical examination, in amounts from \$500 to \$10,000 per employee at low cost. Permanent Total Disability included without extra charge.

GROUP INSURANCE protection for employees of factories, stores and business concerns is steadily increasing. It has proved of value to those adopting it. Others will take it up as soon as they learn of its usefulness.

Our book on "GROUP LIFE INSURANCE" will be mailed without obligation. It will repay careful reading. Our well developed facilities and personnel, especially trained in Group Insurance, are at your service.

John Hancock
LIFE INSURANCE COMPANY
OF BOSTON, MASSACHUSETTS

A STRONG COMPANY over Sixty
Years in Business. Liberal as to Con-
tract, Safe and Secure in Every Way.

NB

The GLEN SPRINGS



IN all America, there is no other place like this—where the Radio-active mineral springs and the natural Nauheim brine baths offer you all the advantages of European Spas.

An estate of a thousand pine-fragrant acres. A setting of matchless scenic loveliness in the heart of the Finger Lakes country. A justly famous cuisine, with private Dairy and Poultry farms. A daily concert program. Visit "the American Nauheim" this fall—and take off ten years!

The Baths and other treatments are especially suitable for heart, circulatory, kidney, nutritional and nervous disorders, rheumatism, gout, and obesity. Complete medical and hydrotherapeutic facilities, and modern aids to diagnosis. Write for illustrated booklet and special winter rates.

THE GLEN SPRINGS
WATKINS GLEN • NEW YORK
WILLIAM E. LEFFINGWELL, President

prosperity is marked by a reduction of prices, and that this is the only way by which prosperity can be made the normal condition and prevented from being merely spasmodic.

Here is some testimony on the general subject of prices that cannot be dismissed with a gesture, for the man who offered it can also offer compelling evidence to support the accuracy of his theory.

RECENT BOOKS RECEIVED

Applied Budgeting, by Henry Bruère and Arthur Lazarus. A. W. Shaw Company, Chicago and New York, 1926. \$7.50.

Arbitration and Business Ethics, by Clarence F. Birdseye. D. Appleton and Company, New York, N. Y., 1926. \$2.50.

Chemistry in the World's Work, by Harrison E. Howe. D. Van Nostrand Company, New York, N. Y., 1926. \$3.00.

The Coal Miners' Struggle for Industrial Status, by Arthur E. Sufferin. The Macmillan Company, New York, N. Y., 1926. \$2.50.

Common Sense of Money and Investments, by Merryle Stanley Rukeyser. New Enlarged Edition. Simon and Schuster, New York, N. Y., 1926. \$2.85.

First Economics, by James Edward Le-Rossignol. A. W. Shaw Company, Chicago and New York, 1926.

Government Regulation of the Coal Industry, compiled by Julia E. Johnsen. The H. W. Wilson Company, New York, N. Y., 1926.

How Banks Increase Their Business, by G. Prather Knapp. Rand McNally & Company, Chicago, Ill., 1926.

The Merit System in Government, report of the Conference Committee on the Merit System. National Municipal League, New York, N. Y. \$1.50.

The Mind of the Millionaire, by Albert W. Atwood. Harper & Brothers, New York, N. Y., 1926. \$2.50.

Modern Tariff History, by Percy Ashley (New Third Edition). E. P. Dutton & Company, New York, N. Y., 1926.

Rainbow Countries of Central America, by Wallace Thompson. E. P. Dutton & Company, New York, N. Y., 1926.

Readings in Money, Credit and Banking Principles, by Ivan Wright. Harper & Brothers, New York, N. Y., 1926. \$4.00.

Retail Advertising of Men's and Boys' Wear, by Allen Sinzheimer. Harper & Brothers, New York, N. Y., 1926. \$3.50.

A Sales Manager's Field Letters to His Men, by W. Livingston Larned. Harper & Brothers, New York, N. Y., 1926. \$3.50.

The Story of Steel, by Bernard Walker. Harper & Brothers, New York, N. Y., 1926. \$4.00.

The Taxation of Inheritance, by William J. Schultz. Houghton Mifflin Company, New York, N. Y., 1926. \$3.00.

The Technique of Executive Control, by Erwin Haskell Schell. Second Edition. McGraw-Hill Book Company, New York, N. Y., 1926. \$1.75.

Wages in the United States. National Industrial Conference Board, Inc., New York, N. Y., 1926. \$2.50.

Wealth, Virtual Wealth and Debt, by Frederick Soddy. E. P. Dutton & Company, New York, N. Y., 1926. \$3.50.



One of the outstanding developments by Firestone Research Engineers is the process of dipping the cords in a rubber solution which impregnates and insulates every fiber of every cord. This adds strength to the cords and reduces to a minimum internal friction and heat so destructive to tire life.

The Gum-Dipping of the cords made it possible for Firestone to develop the Gum-Dipped Truck Pneumatic which gives to truck operators not only comfort and safety but a definite dollars-and-cents saving in increased mileage.

In the battle of tires on race tracks—in the day-in and day-out service of the largest truck, bus and taxicab fleets—on the cars of hundreds of thousands of motorists everywhere—Gum-Dipping has demonstrated its supremacy in greater economy, safety and comfort.

Equip your fleet of trucks with Firestone Gum-Dipped Truck Pneumatics. They are built as only Firestone can build them and will perform as only Gum-Dipped Tires can perform. See the nearest Firestone Dealer.



MOST MILES PER DOLLAR

AMERICANS SHOULD PRODUCE THEIR OWN RUBBER *Howey Firestone*

EGYPTIAN CIGARETTES

ORIGINAL QUALITY

Exclusively Made for Real Connoisseurs.

One Dollar will bring samples of Double Value all kinds, sizes, tips, monograms, crests, blends, prices, for selection of your future supply. "DOUMAN" - (Importers) San Francisco - U.S.A. 486 Bryant Street



Trade Marks

"Trade Mark Profits and Protection" points out by practical example sound business practice covering the selection and registration of trade marks and successful method of influencing the public by their means. The technicalities of trade marks made clear by interesting cases.

BY H. A. TOULMIN, JR.

of the firm of Toulmin and Toulmin, attorneys, with offices in Dayton and Washington. Mr. Toulmin is recognized as one of the leading authorities who write today on patent and trade-mark subjects. His new book should be read by every progressive manufacturer. 258 pages. Price \$4 at leading book sellers or from

D. VAN NOSTRAND CO.

8 Warren Street, New York

Human Nature In Business

Fred Kelly's book, "Human Nature in Business," is about people and what they do. We believe you will enjoy reading it. If you want to see how Fred Kelly writes, turn to his column in the back of this magazine.

Then if you're satisfied that the book will be worth it, send a dollar to Nation's Business, Washington, D. C., and we will mail you "Human Nature in Business" postpaid.



Send for this Book

TAGS may seem a trivial matter to busy officials, but a check on the waste, losses and mistakes directly traceable to tags that fail to inform would show the really important part they play in production and sales.

Let Denney Show You the Difference

between good, bad and indifferent tags. The little booklet, "How to Buy Tags Right", will give you the whole story in five minutes' reading—how to make tags speed up production, how to insure accurate shipments, emphasize trademarks, etc. Just check and send the coupon below.

DENNEY TAGS

38 W. Barnard St., West Chester, Pa.
World's Largest Tag Makers

DENNEY TAG COMPANY

38 W. Barnard St., West Chester, Pa.
☐ Send "How to Buy Tags Right"
☐ Send samples of—work—shipping—marking tags.
☐ Kindly quote on enclosed tags.
Name _____
Street _____
City & State _____

When You Need Figures

in a hurry—not hurried figures—send your inventory and other emergency computations to a skilled organization of public calculators. 48-hour accurate service.

ATLAS CALCULATING SERVICE

19 W. Jackson Boul. Chicago, Ill.

Scientific Facts About Diet

A CONDENSED book on diet entitled "Eating for Health and Efficiency" has been published for free distribution by the Health Extension Bureau of Battle Creek, Mich. Contains set of health rules, many of which may be easily followed right at home or while traveling. You will find in this book a wealth of information about food elements and their relation to physical well-being.

This book is for those who wish to keep physically fit and maintain normal weight. Not intended as a guide for chronic invalids as all such cases require the care of a competent physician. Name and address on card will bring it without cost or obligation.

HEALTH EXTENSION BUREAU

SUITE W-438 GOOD HEALTH BLDG.
BATTLE CREEK, MICHIGAN

News of Organized Business

By ROBERT L. BARNES

LIGHTENING and more equitably placing the local tax burden is interesting chambers of commerce. The study of this problem has been undertaken in various ways. Most chambers have felt that the committee is the most effective agency. They have appointed either large or small committees as they felt that general public interest was gained or that speed and efficiency were more important. Other chambers, seeing the difficulties that confront the mind untrained in the intricacies of civic finance, have hired experts to study the situations. But whatever the machinery set up, there have been marked advances in method.



Provocative antagonism to city officials has been abandoned. Most officials need and desire all the assistance they can get. Efficiency is more easily obtained in an atmosphere of co-operation than in an air of muckraking and fault-finding.

Another advance is the realization that work must be continuous. Formerly, it was usual to take up the question, arouse public feeling, instigate a few transient reforms, and let the matter drop. Taxation is a subject about which it is hard to sustain interest, but several chambers have done useful work covering a period of several years.

Proper budgeting is being recognized as a good approach to efficiency. Some chambers make it a practice to study tentative budgets, going over them item by item with city officials, before it is too late to remedy any appropriations to which exception might be taken.

The problem of what is the most effective agency for undertaking tax studies must be decided according to local conditions. It is a marked advantage to have but one agency doing the work. Two organizations mean the duplication of effort and expense, and the minimizing or elimination of any good work done by either group because of the inevitable development of differences of opinion. The chamber of commerce is usually the best agency to do the work because it is the most representative, is better able to finance the work, and assures continuity of effort. The mortality rate of "tax associations" is very high.

It has been found that, on the whole, the paid expert bureau does the most effective work, though it is more expensive. It works more systematically than do committees. However, an aroused public interest is often necessary, and the committee system helps. The Cincinnati Chamber enlisted the support of other flourishing organizations and, as a result of a survey, the entire municipal government was re-organized.

Kansas City, Kansas, Des Moines, Iowa, and Hoboken, New Jersey, are cities that have organized special bureaus of municipal research and efficiency either as an integral part of the local chamber or closely affiliated with it.

The Joliet and Indianapolis Chambers have done outstandingly good work on the problems of local taxation. El Paso conducted a survey which promises to be helpful.

Whether a local chamber of commerce should go into the field of state taxation is a debatable matter. Numerous chambers have at times done something with the problems, but more in the line of dealing with specific matters than in the fixing of general principles.

Wheeling, West Virginia, developed a state-wide program and circulated it among other chambers asking for their support. Unfortun-

nately this was done such a short time before the legislative session that but little of the report was incorporated into law. However, it received widespread comment and respectful attention. The plan may bear fruit later. The Hoboken Bureau has been particularly active, having dealt not only with the local but also with the state problems.

It is probably best for a chamber to concentrate on local matters first, and then, after getting a thorough understanding of their nature, study the state system and its needs.

Among the rather large number of chambers that have undertaken this work are those of New Bedford, Mass.; Akron, Ohio; Minneapolis, Minn.; Youngstown, Ohio; North Adams, Mass.; Oshkosh, Wis.; Pittsburgh, Pa.; Seattle, Wash.; Peoria, Ill.; Frankfort, Ky.; New Albany, Ind., and Middletown, Conn.

Waste Elimination

FOREIGN interest in Simplified Practice as a method of waste elimination and as one remedy for some of the economic problems faced in other lands, has increased steadily. Italy has an organization, recently formed, to study and make public the work of Simplified Practice. The British Rubber and Tyre Manufacturers, through their Research Association, have evinced a lively interest in the progress in the United States. Many requests have come from other interests in England, Australia, South Africa, Holland and Austria. Leading engineering and scientific publications in the latter two countries as well as in France and Italy have devoted considerable attention to the significance of the Simplified Practice movement.

Throughout the United States activity on the part of the state manufacturers' associations has increased in California, Illinois, Michigan, Washington, Massachusetts, Virginia, Tennessee, Colorado, Connecticut and Nevada. These state bodies are cooperating with the Division in bringing to their memberships full information as to the possible economic benefits from this form of waste elimination. These activities are in keeping with the attitude of the National Industrial Council, made up of presidents and secretaries of the manufacturers associations in thirty-eight states, which has adopted resolutions endorsing the movement.

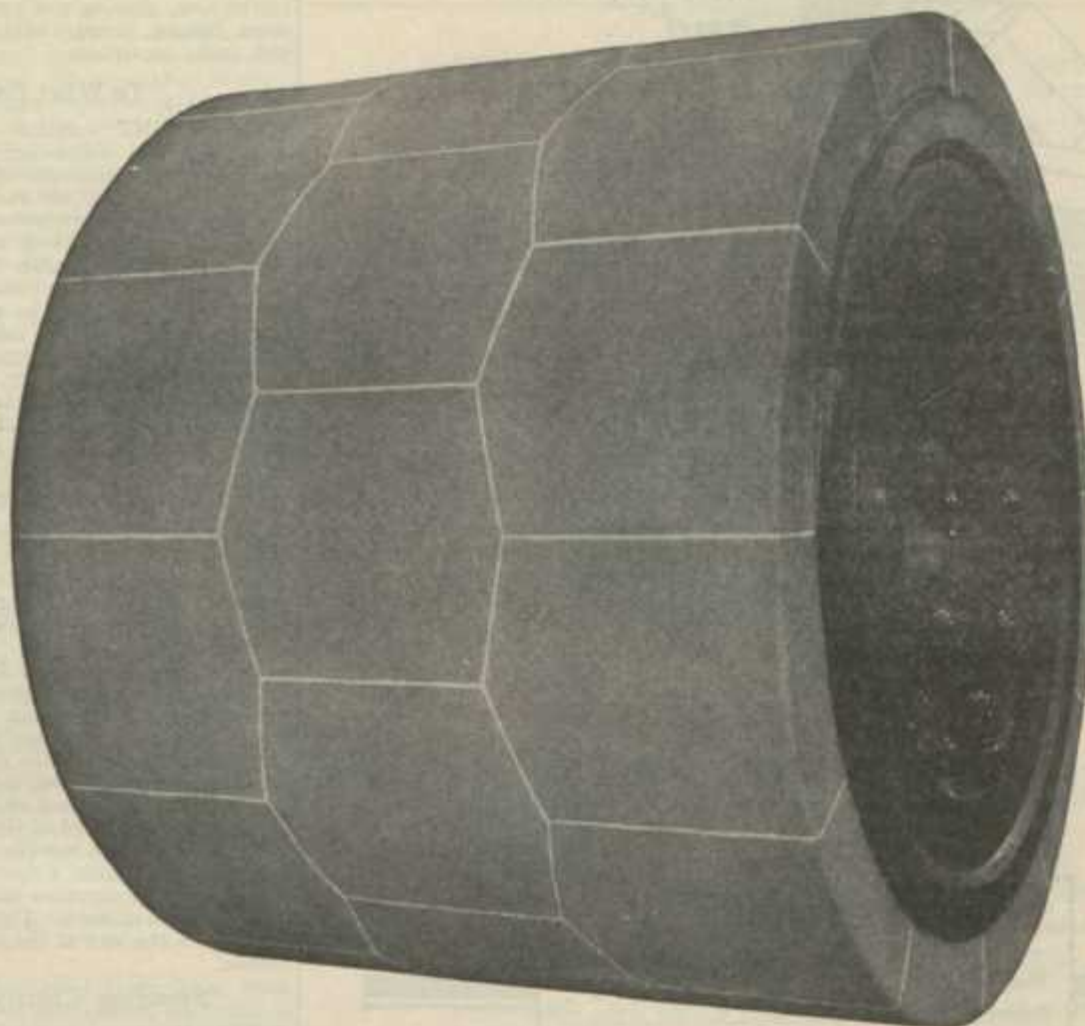
Waste Elimination is being made a major topic at conventions of a number of national organizations, including the Society of Industrial Engineers, American Petroleum Institute, National Association of Purchasing Agents, American Zinc Institute, Kardex Institute.

Improving Our Cities

WHAT promises to be a large and important gathering of municipal officials and asphalt contractors, producers, engineers and chemists of the United States and Canada is scheduled to be held in Washington, D. C., November 8 to 12, under the joint auspices of the American Society for Municipal Improvements, The Asphalt Association and the Association of Asphalt Technologists.

Both separate and joint sessions will be held at various times during the week, the object being to discuss, for mutual benefit, a program of municipal improvements, particularly in the matter of street and highway construction, that eventually will make North American cities the most up-to-date in the





And now wood pulp is ground by a man-made abrasive

The manufactured grinding wheel has taken its place in the pulp industry. Groundwood pulp, uniform in quality, is now being produced successfully by a Norton Pulp Stone.

The Norton Pulp Stone replaces the quarried sandstone wheel used in pulp mills since the beginning of newsprint pulp, just as the man-made wheel has replaced the old-fashioned grindstone in the manufacture of cutlery and hundreds of other products. Thus the abrasive wheel trademarked "Alundum" or "Crystolon" carries on through industry after industry playing its vital part in countless numbers of grinding and machining operations. Today, there is hardly an industry in the world which, directly or indirectly, does not depend upon modern abrasives and grinding machines.

NORTON COMPANY,

Worcester, Massachusetts

NORTON

Grinding Wheels
Grinding Machines



Refractories-Floor
and Stair Tiles



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THE efficiency of North America Parcel Post Insurance is especially appreciated by those who make parcel post shipments daily. It places dependable, economical insurance on every package at a marked saving in time and labor. A coupon from a North America Coupon Book insures each package at the wrapping desk. Ask your insurance agent or broker, or send the coupon below for complete information.

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Philadelphia, Pa., Dept. N-11

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Street _____
City _____ State _____
Wants information on Parcel Post Insurance

DETROIT

"A Wonderful City"

THE Eyes of the World are focused upon Detroit because of its remarkable growth and prosperity. Its own people give daily evidence of their faith in its future by factory expansion, new industries, mammoth buildings and the erection of homes and more homes.

Detroit's natural beauty, its water and rail facilities its industrial opportunities, its educational and home life advantages and its spirit of contentment, and progress have attracted people from everywhere.

Fortunes have been made in Detroit Real Estate—the investor has exceptional opportunity here. Yet this "Wonderful City" is only beginning its career as a great commercial and industrial center.

For those who would like to share in the profits, we have compiled the vital facts in a book profusely illustrated with wonderful views.

You should have this book. It is mailed free upon request.

GLOVER WATSON
ORGANIZATION
Incorporated
Washington Blvd. Bldg.
Detroit, U. S. A.



OCCUPATIONAL ANNOYANCES

"My work Penalizes my throat"

"Without Luden's
I would be lost,"
writes a Kiwanis
governor.

"I use the 'phone constantly, sell merchandise, dictate many letters, address audiences, speak over the radio—and smoke too much. I get the greatest relief from Luden's. They always soothe my throat."

(Original letter on file)

Hundreds of similar letters praising Luden's have been received from those who must depend on a clear voice and a trouble-free throat.

Luden's beneficial and exclusive menthol blend will relieve and soothe your throat and nose. Especially helpful for summer colds, and hay fever. Sold everywhere—in the familiar yellow package—5c.

LUDEN'S MENTHOL COUGH DROPS

world. All kinds of municipal problems will be considered, but emphasis will be laid on street planning, types of paving and methods of construction, opening and replacing pavements, street lighting, street cleaning, snow removal and traffic regulation.

To What End?

PERMANENT exhibits of manufactured products are maintained by many chambers. Yet the experience of most secretaries would seem to point out that there is little to be gained by their maintenance. The exhibit is expensive, hard to keep up without skilled help, and of questionable value. The city, university, or school museum seems to be the place for such work. The chamber may find that it can get together small interesting exhibits of single lines of commodities, or of commodities of a single country, as interest in the particular commodity or country is felt. After the exhibit has been featured for a short time, it should be cleaned out to give way to something else.

Labor Bureau

FOLLOWING a suggestion from the Central Trades and Labor Assembly, the Board of Governors of the Tampa Board of Trade appointed a committee to consider the establishment of a Labor Bureau as one of the bureaus of the organization.

The Central Trades and Labor Assembly in the letter making this suggestion cited the fact that there is an excellent representation of trades union organizations on the Board of Trade, and that it was the desire of the trades union organizations that a Labor Bureau be established by the Board of Trade with representation on the Board of Governors.

The committee is working on plans for the organization of such a bureau as is desired, together with a tentative outline of the functions and plan of work. There are no apparent obstacles in the way of the organization of the bureau.

Spending Charity Money

MONEY gifts to charity are the subject of a little comment in the bulletin of the Merchants Association of New York.

"Where does the money go?" is a question which every one should ask of charities, as well as of his own pocketbook. But it's one that is sometimes overlooked.

The people who start up organizations are occasionally so busy raising money that their ideas for spending it are rather cloudy. They plan to run an institution, for instance, but are vague as to how much it will cost to buy and equip a building. And, worst of all, they forget that it isn't the initial cost, it's the upkeep! Instead of limiting themselves to work which they could swing satisfactorily, they try some ambitious plans to which their resources cannot measure up.

The contributor, like the organizer, is sometimes so interested in the way money is being collected, that he neglects the other half of the story. Important as it is to find out that fund-raising methods are up to standard, make sure that the spending, too, is not only honest but wise and efficient. [Prepared by the Bureau of Advice and Information of the Charity Organization Society.]

What Are the Facts?

UPON the initiative of the New England Council, the United States Department of Commerce has undertaken a careful industrial and commercial survey of New England.

In commenting on the survey the Manchester, New Hampshire, Chamber of Commerce bulletin says:

In carrying on the survey the New England Council has contributed the services of a number of expert engineers. The entire section will be benefited by facts disclosed by the survey, from which information will be

derived that, we believe, will be vital to the future welfare of the industries of New England.

This survey, in the single item of boots and shoes, has already disclosed conditions of great value to that industry. It is expected that a similar result will be obtained in many of the other leading industries in New England. In fact, some of the activities of the New England Council will have their basis in information gleaned from this survey.

New England must go ahead as a whole. What helps the rest of New England helps us, and so, in cooperating in the making of this survey, you are not only helping New England but helping Manchester.

Air Consciousness

AIR TRANSPORT trails have been blazed by the Air Mail Service in true pioneer fashion. But it now devolves on private industry



to take up the sound development of this new form of transportation and encourage its use in carrying goods and passengers. Postmaster General New recently stated that the Government has intended from the first to "turn the business over to private capital, but not until the present has there been any private capital that

either cared enough or knew enough about it to give it a moment's consideration."

The National Chamber's Transportation Department has recently published a bulletin on "Air Commerce." The bulletin takes up the air mail, air ports, international agreements, the Air Commerce Act, gives schedules of the different air mail routes, and a table of postage rates.

According to the Daniel Guggenheim Fund for the Promotion of Aeronautics, the public is definitely becoming more interested in flying. Recently this fund appropriated a large sum of money for the study of aeronautics at Leeland Stanford University.

Electrical League

A GREAT impetus was given to the solution of the problems that face electrical concerns by the formation recently of the National Electrical Manufacturers' Association.

This new trade association has a membership of 270 electrical concerns with a gross annual business exceeding \$1,500,000,000, and is the result of merging the Electric Power Club, The Associated Manufacturers of Electrical Supplies, and the Electrical Manufacturers Council.

The general purpose is to advance the art of manufacturing adequate and reliable electrical equipment.

Specifically, the objects, according to the constitution, are to further the interests of the makers of electrical apparatus and supplies in manufacturing, engineering, safety, transportation and other industrial problems; to promote the standardization of electrical apparatus and supplies; to collect and disseminate information of value to members or the public; to appear for members before legislative committees, governmental bureaus and other bodies in matters affecting the industry; to promote a spirit of cooperation among members for the improved production, proper use and increased distribution of electrical apparatus and supplies.

The association as now organized has three divisions—policies, apparatus and supply.

The Board endorsed the proposal to give the radio section the status of a division.

Gerard Swope, president of the General Electric Company, was elected president of the new association. J. W. Perry, president of Johns-Manville, Inc., was elected treasurer.

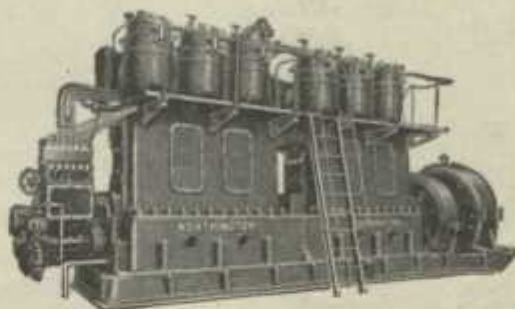
Charter members of the association include the Allis Chalmers Manufacturing Company,

WORTHINGTON



PUMPS, COMPRESSORS, CONDENSERS, OIL AND GAS ENGINES
FEEDWATER HEATERS, OIL AND WATER METERS

Worthington-Diesel vertical single-acting two-cycle solid-injection type engines are built in powers from 50 to 540-hp. All but the largest sizes can be shipped from stock. Double-acting air-injection types built up to 12,000-hp. units.



What do you pay for fuel?

CHEAP fuel is a primary requisite to cheap power. For each B. t. u. of heat content a Worthington Diesel Oil Engine will deliver from two and a half to three times as much energy as a steam plant of the same rating.

On part load there is only a slight decrease in efficiency due chiefly to mechanical friction. When shut down, fuel costs stop.

Small and moderate size power plants having little or no need for exhaust steam have found the Diesel Oil Engine the ideal prime mover. Other plants having greater need for exhaust steam have found it a paying investment to carry part of the load on a Diesel. Large central stations have found the Diesel Oil Engine excellent for peak-load service, stand-by service and, in cases, cheaper than transmitting power to small remote localities.

Worthington has been building and installing Diesel engines for many years. We would be glad to help you compare the present cost of producing power in your plant with the cost of power produced by Diesel engines.

7780-6

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*(One of a series of advertisements illustrating
the many uses of Union Drawn Steels.)*

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developed in the pro-
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DRAWN STEELS are
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Anaconda Copper Company, Crocker-Wheeler Company, Crouse-Hinds Company, Cutler-Hammer Manufacturing Company, Electric Storage Battery Company, General Electric Company, Landers, Frary and Clark, National Carbon Company, Inc., National Metal Molding Company, Radio Corporation of America, Reliance Electric and Engineering Company, Robbins and Myers Company, Stromberg-Carlson Telephone Company, Western Electric Company, and Westinghouse Electric and Manufacturing Company.

Where Do You Park?

THIS paragraph in the bulletin of the Fifth Avenue Association of New York interested us. There is a great deal of talk about speeding up traffic though little attention seems to be paid to the other phases of the problem.

The parking problem, in its relation to traffic and to the business interests of our members, has become one of the most serious responsibilities ever presented to our association. There is a pronounced and dangerous tendency to regard the shopper's automobile and the stopping of cars for the transaction of business as the cause of all traffic troubles, and to visualize our important commercial thoroughfares as traffic speedways, without regard to the part which these public highways play in the transaction of business and in forgetfulness of the reasonable use of the streets to which business is entitled, and upon which it must depend for profitable operation.



Selling Terms Not Goods

WHEN a business gets to the point of selling terms, not goods, there are many dangers that are not always recognized until serious damage is done, according to J. H. Tregoe, executive manager of the National Association of Credit Men.

Seemingly of late the competition in sales, instead of being confined to legitimate features, has taken the form of terms and discount offerings, the seriousness of which in the final results of a business could not have been reckoned with.

The discount for cash should not be granted on terms or conditions that will make it simply a trade discount, instead of what it really is, a discount for cash.

If in selling on long terms, with a discount for cash privilege, the creditor is willing to accept a note payable at the end of the period, with a discount allowed and interest added from the expiration of the discount for cash period to the expiration of the net period, with legal interest added, the real purpose of the discount for cash has been abused, for a note, even with a good endorsement, is not cash, and when discounted is a contingent liability of the payee.

To have such a practice creep into any line of business for the purpose of stimulating sales, spells ultimate failure.

We cannot play fast and loose with terms if we want to conserve profits. Terms are nothing more than what they are intended to be, the measure of the credit; to use them as a sales feature is attacking one of credit's fundamental principles and will play havoc with any business if practiced too widely.

Do not sacrifice stability and sound business methods to mere expedients, particularly when the expedients will cause a serious backwash when overdone.

Recoveries in fraudulent failures investigated by the National Association of Credit Men in



Pipe Threader



Electric Ironer



Meat Grinder



Coffee Urn



Power Plane



Floor Polisher



Electric Ironer



Door Lock Mortiser



Lawn Mower



Ventilating Fan



Router or Shaper



Sprayer

50 Different Motors for 50 Special Jobs

In the 12 years that it has served industry with fractional horsepower motors, The Domestic Electric Company has developed half a hundred special motors for as many different applications.

Among them is not a single experiment; not a motor has been sold on the basis of what it ought to do rather than what it will do. Every model was specially designed to perform exactly the work it is now performing, and to serve better than any other type or modification of type could serve.

Instead of trying to adapt industries to a line of electric motors, we have engineered motors into industries—developing new motor applications, improving old applications, modifying and fitting existing types to the fields they were to serve.

The accompanying illustrations show a few of the many fields in which Domestic Electric fractional horsepower motors have become widely popular. In all these applications the universal motor drive is used, and in every case Domestic standards of design and manufacture have effected new economies of operation and raised the efficiency of motor-driven appliances.

This service deserves the consideration of any manufacturer who employs motor-driven production devices in his own manufacturing—drills, hammers, grinders, buffers, saws, etc.—or motors in the manufacture of appliances that his organization sells. A brief inquiry will place the time of a Domestic engineer at your disposal in your own plant without obligation to you.

THE DOMESTIC ELECTRIC COMPANY

7209-25 ST. CLAIR AVE.

CLEVELAND, OHIO

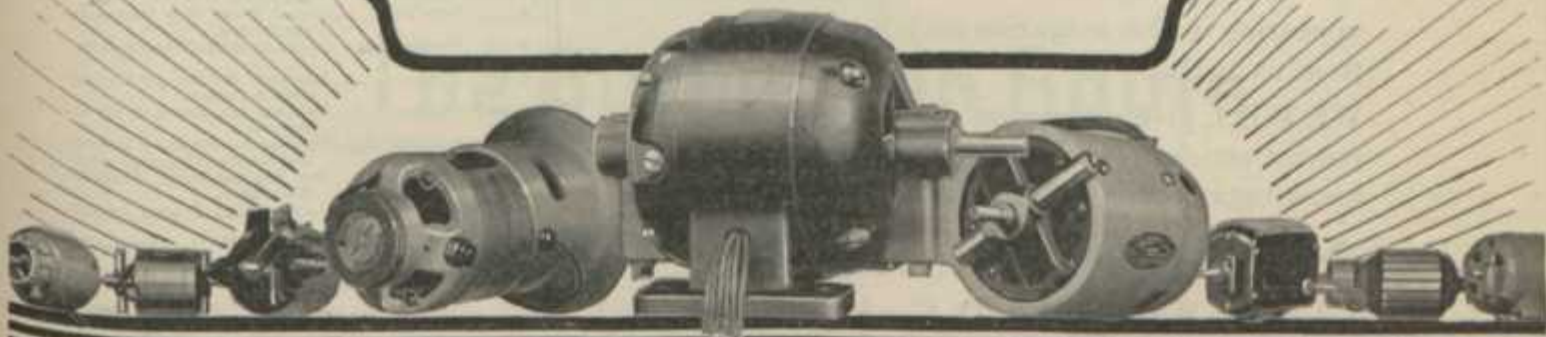
Manufacturers of fractional horsepower motors exclusively

(80)

Domestic Electric Motors



Siren





IN RECOGNITION

PRINTERS realize that exceptionally good paper is a prerequisite of exceptionally good—impressive—printing. Experienced creators of advertising realize it also.

To encourage the production of more impressive printing and direct advertising, the Cantine Awards were inaugurated some three years ago. Every three months, two-color, steel-engraved certificates are presented to the writer and printer of the best work done on a Cantine coated paper. In addition, the winning work is featured in our national advertising.

Competition of this kind has given many an example of unusual printing and advertising ability—and its producers—the valuable recognition they deserve.

The current contest closes December 30th. Between now and then, enter at least one example of your work. Details and sample papers sent on request. The Martin Cantine Company, Dept. 360, Saugerties, N. Y.

Cantine's COATED PAPERS

CANFOLD

ASHOKAN

ESOPUS

VELVETONE

LITHO C I S

Reprints of Articles

appearing in this magazine may be ordered from us at cost.

WE WILL give permission upon request to reprint articles from NATION'S BUSINESS in house organs or in other periodicals.

NATION'S BUSINESS
Washington, D. C.

the past fifteen months amount to \$396,280. These recoveries are more than the entire cost of operating the department since its active organization. It is hard to estimate the effects of the department but there has been a decrease in the number of failures. It is also safe to estimate that the moral effect of the department is several times the amount subscribed, \$1,500,000, for credit protection.

Reckoning the Cost

WITH a history of ten active, useful years as a background, the Illinois Manufacturers' Costs Association begins its eleventh season. It was organized in 1916 to foster among Illinois manufacturers a proper appreciation of the importance of accurate cost information. Its career has justified the fondest hopes of its founders.

Two vital subjects are going to be the object of particular study this year. Committees of the membership will study the questions of "The Use of Standard Costs" and "The Cost of Distribution." This work will be undertaken in addition to the usual program of speakers and meetings.

Anyone interested in the work of the association should write to the Illinois Manufacturers' Costs Association, 251 S. LaSalle St., Chicago, Illinois.

Apple Industry Grows

NEARLY half the market supply of apples is produced in the eleven states known as the "western boxed apple region." This great western industry has grown rapidly in the last twenty years.

Interest in the subject of apple growing has been raised by National Apple Week, October 30 to November 6.

Washington, Oregon and Utah ship the largest share of the winter supply of boxed apples. A few productive valley regions such as the Wenatchee, Yakima, and Hood River sections have become prominent because of the immense annual shipments of high-grade fruit. The reputation of northwestern apples seems to be based on choice varieties that are well grown, carefully handled, uniformly graded, and attractively packed.

Package marks are reliable and trading is on a fairly definite basis.

Boxed apple exports exceeded six million bushels in each of the several recent seasons. The boxed apple is becoming popular in continental Europe and in various markets in Latin America.

Department of Agriculture bulletin "Marketing Western Boxed Apples" (1415-D) tells the story of the little known apple section in the western valleys. It describes methods of harvesting, packing, selling, storing, transportation, and distribution. Principal markets for boxed apples are described together with their differences of practice and preference. Cost of marketing is worked out in some detail and there is also much special information.

Coming Business Conventions

(From Information Available October 1)

Date	City	Organization
Nov. 1.....	New York.....	American Steamship Owners Association.
4.....	New York.....	United States Fire Companies Conference.
8-12...	Washington, D. C.	American Asphalt Association.
8-12...	Buffalo.....	American Bottlers of Carbonated Beverages.
9-12...	Chicago.....	National Association of Ice Industries.
9-12...	Asheville, N.C.	National Association of Railway and Utilities Commissioners.
11.....	Boston.....	New England Paper Merchants Association.
16-18...	Memphis, Tenn.	National Tire Dealers Association.
16-18...	Wichita Falls, Tex.	Southwestern Ice Manufacturers Association.
16-18...	Boston.....	Society of Automotive Engineers.
17.....	New York.....	American Railway Association.
17-18...	New York.....	National Industrial Traffic League.
24-26...	French Lick, Ind.	National Association of Farm Equipment Manufacturers.



They raced the western prairies with the government mail as the stake

SINCE 1884, fast Burlington trains had carried the government mail from Chicago to Omaha—and made history.

That such a record should go unchallenged was not to be expected. The government mail was a prize worth a railroad's winning. And great train-loads of mail were not all of it. There was the prestige—for none but a fast road could compete.

The challenge came, and a race of flying steel—a race that still lives in Middle West prose and verse.

Day after day, night after night, the challenger matched its trains against the Burlington. Across the western prairies, like greyhounds, the giant locomotives strained steel muscles to their limit.

The challenger's trains were empty, but ready to be filled with the fast cargo. Let the government patronize the winner. The issue was fair.

But more than tracks and powerful locomotives make a railroad. The Burlington still carries the fast mail from Chicago to Omaha—has carried it for forty-two uninterrupted years. A



For 75 Years

The Burlington has completed seventy-five years of successful railroad service. The Burlington has never been in the hands of a receiver; it has never defaulted on a financial obligation. The Burlington has counted success as necessary to a useful existence. It knows no other way to provide the high class of service the public has demanded and which the Burlington has made its first purpose.

Harold E. Peterson

PRESIDENT OF THE BURLINGTON

striking achievement in good management, of course. On the merit of its performance the Burlington has continued as the fast mail carrier. There is no contract. The government stays on as a satisfied customer.

A striking record in operation, too. For months at a time these all-mail trains, four or five a day, go crashing westward and eastward, passing a dozen other trains in their flight, without being late by a single minute!

But Burlington men, with forty-two years of "knowing how," have made the fast mail record in the Middle West. Men on the trains and men behind them. Men in overalls, men in uniforms, men at desks.

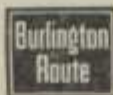
It's the brains and skill and experience of Burlington men that have made possible the kind of service you find on Burlington trains today—mail trains, passenger trains and freight trains.

Burlington men—who were first to use airbrakes, who made a world's "on time" record, who conceived and put into service the first railway mail postoffice, who made the Burlington the largest carrier of summer tourists to the Rockies, who made the Burlington the largest food distributor in the world.

Men who have made the Chicago, Burlington & Quincy Railroad successful for seventy-five years.

The Burlington Route

The National Park Line



Everywhere West

11,500 MILES OF RAILROAD IN THIRTEEN STATES

When writing to CHICAGO, BURLINGTON & QUINCY RAILROAD please mention Nation's Business

EXECUTIVE CONTROL of Industrial Power

MANUFACTURING executives are examining more critically than ever before their steam generating practices.

And the tendency is to go deeper than mere mechanical details—to recognize that steam generation, though a subordinate manufacturing process, deserves the co-ordinating and directing influence of executive control.

As a result, there is closer appraisal of all the factors that affect power cost, and far more economical use of existing equipment, with better planning of future improvements.

It is only natural, therefore, that industrial executives are turning more and more to the services of the Fuel Engineering Company—a consulting organization which for 20 years has assisted the management of many industrial and public utility companies to maintain the best control of every factor in steam generation.

Bringing to bear a wealth of varied experience, an unusual fund of practical data, the services of this Institution are sought to supplement the experience of the client's organization, and to facilitate more rapid and more accurately directed progress toward further power economy, and closer executive control of the process.

FUEL ENGINEERING COMPANY
of New York

Consulting
Fuel and Power Engineers

116 EAST 18th STREET
NEW YORK

ESTABLISHED 1907

Lakeland's Message to Industry

Lakeland—the metropolis of Polk County, one of the richest counties per capita in the United States—a thriving community of sober, industrious, merchants, bankers, fruit growers, farmers and professional men and women—has a serious message to American Industry.

Lakeland is the center of a populous and prosperous market—the shipping point for a community producing millions of dollars worth of winter-grown fruits and vegetables.

Lakeland is the distributing point for a "ready-to-buy" market—a market ready to buy millions of dollars worth of manufactured articles that American Industry can produce.

Lakeland needs small factories, branch factories and distributing agencies for a score of specific commodities.

Manufacturers looking for new markets and opportunities for expansion are invited to investigate the actual possibilities offered here.

Potential labor, low living costs, high living standards, healthful climate, splendid schools and churches, amusements and year-round outdoor recreational facilities make Lakeland the ideal place for the industrial worker to live, work and prosper.

Speculation has had no part in Lakeland's forty years of steady growth and Lakeland's future will not be jeopardized by promises that cannot be backed by performance.

Lakeland seeks serious investigation by seriously intentioned manufacturers and offers the pledge of a stable community that your inquiry will bring specific facts—not vague generalities or "painted promises."

You'll like **Lakeland**
Chamber of Commerce

Lakeland Chamber of Commerce, Industrial Division,
206 Orange Street,
Lakeland, Florida.

Gentlemen:

I am interested in the industrial opportunities of Lakeland. My line is..... Please send me all data you have on hand without obligation to myself.

Name.....

Address.....

Government Aids to Business

Reports of government tests, investigations and researches included in this department are available (for purchase or free distribution) only when a definite statement to that effect is made. When publications are obtainable, the title or serial number, the source, and the purchase price are included in the item.

How FAR LEGISLATURES can go in fixing the conditions of labor contracts is an unsettled question. That rates of wages cannot be determined in private employment seems fairly established under existing constitutional provisions and constructions. However, many factors of

A Study of the State Control of Wage Payments

the relationship between employers and employees are controlled, or control is attempted, by law. The conflicting interests of buyer and seller make it necessary that judicial power be used in the interpretation of contracts. The disadvantages of a necessitous man in dealing with disputes regarding labor, the sole support of the vendor and his family, are considered matters of public concern, as to which the state can act as matters of public welfare.

In theory, the two parties might be left to settle the questions by contract freely made between them. But inequality of economic conditions opens the door for oppressive terms and diverse responsibilities. The laws are, for the most part, aimed to protect the working man. Though clearly an interference with the freedom of contract, it has finally been recognized that the public welfare requires that the weaker party to the wage contract should receive legal protection.

In Bulletin No. 408 of the United States Bureau of Labor Statistics, the texts of the laws of the various states are reproduced, together with summaries of decisions construing these laws. The publication may be procured on application to the Superintendent of Documents, Government Printing Office, Washington, D. C., at 25 cents a copy.

THE LIFE OF FIRE-CLAY BRICK (commonly referred to as clay refractories) used in building the walls of boiler settings is dependent largely upon the chemical and physical reactions which

Clay Brick and Its Use for Boiler Furnaces

take place in the brick at very high temperatures existing in the fire box of a boiler in operation. These changes are also affected very materially by the amount and composition of coal ash and dust which is brought in contact with the brick and forms a slag.

Although these reactions cannot be studied as they are taking place, because of the very high temperatures, knowledge of their nature and extent can be followed quite closely by studying the products which are formed.

Studies of this nature are being carried on by the Bureau of Standards of the Department of Commerce.

A REVISION OF THE PROCEDURE for testing explosives for permissibility for use in coal mines is contained in Schedule 17A, recently issued by

The Procedure For Testing Explosives

the Bureau of Mines, Department of Commerce. A permissible explosive is an explosive which is similar in all respects to the sample which has passed certain tests prescribed by the Bureau of Mines to determine its safety for use in coal mines, and when used in accordance with the conditions prescribed by the Bureau. While permissible explosives are designed especially for use in coal mines, they are suitable for use in many other blasting operations. A complete official test of an explosive for its permissibility for use in coal mines involves the

No Starting Troubles This Winter

Nothing is more exasperating than a cold engine—nor more costly. Delay in starting—never on time, the worry and fear of whether your engine will start promptly or at all, the terrible wear and tear, are all eliminated if you keep your garage warm.



SCIENTIFIC

Safety Garage Heater

completely solves the problem of warming garages safely, conveniently and economically. It ventilates the garage, keeps it dry, gives even circulation of warmth, has no water to freeze, automatically controlled, requires no care or attention, can cause no dirt or trouble, and occupies no needed space.

Free Booklet. Our booklet, "Winter Motoring," tells all about the Scientific Safety Garage Heater and gives valuable hints that save time and money in winter.

The SCIENTIFIC HEATER
COMPANY
2102 Superior Viaduct
CLEVELAND, OHIO



Proven Economies in Maintenance Painting

Paasche Portable Airbrush Outfits have proven their economy in scores of big plants.

A sulphur company saved \$7,500 on a new addition to its plant. A coffee company saved \$3,300 in its 8½-story office building. A railway supply manufacturer made a direct labor saving of 66%. An ice cream company puts one coat on a 5-ton truck chassis in 20 minutes which required 5 hours with hand brushes. An automobile manufacturer averaged 8,000 square feet of dirty concrete in 7 hours. An oil company paints a 5,000-barrel tank (100' x 40') in 7 hours 40 minutes with one man and a boy.

These are typical cases. You can do as well or better. May we send full description of the portable outfit best adapted to your requirements?

Paasche Airbrush Company
1913 Diversey Parkway
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Also producers of superior finishing equipment for wood and metal working plants, auto body and accessory shops, and all fine finishing.

following: Physical examination; chemical analysis; unit defective charge; gallery tests; gaseous products of explosion; rate of detonation; pendulum friction; freezing test by crusher board (for explosives marked low-freezing); explosion by influence. In addition the Bureau will conduct, at the request of the manufacturer or applicant, the Trauzl lead-block test, small lead-block test, flame test, large-impact test, maximum-pressure test by Bichel pressure gauge, and calorimeter test.

RESEARCH IN THE IGNITION of gases and the propagation of gaseous explosions is being carried on at Pittsburgh in the mining experiment station of the Bureau

U. S. and England of Mines. Dr. H. F. Coward, an English investigator of the British Safety in Mines Research Board, is working with

the Bureau of Mines. Satisfactory progress is reported. The findings will be published in the annual reports of the two organizations.

In exchange for Dr. Coward's services, Dr. R. Thieson of the Pittsburgh experiment station is in Sheffield, England, studying the spontaneous combustion and inflammability of coal dust.

Under the cooperative agreement, information is being exchanged on two very pressing problems, the measurement of the degree of fineness of dust particles and their inflammability. Different phases of these questions are being studied by one or the other of the two organizations.

Some of the problems that are being studied are: the composition of coal as affecting its inflammability, efficacious devices for arresting an explosion, miscellaneous sources of ignition of coal dust, and the effect of the fineness of coal dust on its inflammability.

THE PROPORTION OF 6-INCH coal produced in the operation of a typical large bituminous coal mine in southern Illinois was appreciably increased as the result

Methods of Lump Coal Production

of improved blasting methods developed in the course of an investigation by engineers of the Bureau of Mines, Department of Commerce. The factors that were directly responsible for this improvement were the introduction of a standardized method of shooting and blasting; closer supervision; introduction of a cartridge of smaller diameter and the use of an air space around the cartridge; and the cutting down of the explosive charge.

The Bureau of Mines is investigating the fundamental factors in breaking down coal at the face, which govern the production of lump coal in typical mines working different coal beds. The Bureau recently conducted tests on methods of blasting and use of different explosives in a mine working the Pittsburgh bed in Pennsylvania.

The results of this investigation are given in Serial 2697, "Methods of Increasing Lump-Coal Production, with special reference to southern Illinois," of the Bureau of Mines, Department of Commerce, Washington, D. C.

THE NEED FOR STANDARD MARKET CLASSES and grades of livestock is emphasized by the United States Department of Agriculture in

Standardized Market Grades for Livestock

Bulletin 1360-D, "Market Classes and Grades of Livestock," copies of which may be obtained, as long as the supply lasts, from the Department of Agriculture, Washington, D. C.

"Ever since the establishment of central livestock markets," says the bulletin, "there has been considerable confusion, much disappointment, and untold loss and waste, because of the difficulty in describing market transactions in such a way that the producer on the farm or on the range, the slaughterer at some distant



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Sound Investments— Good For You

A SOUND investment must meet a few rather plain demands. It must safeguard money. It must convert readily into cash. It must pay good interest.

NO INVESTMENT is equally good for all individuals. Before a man's money can be wisely placed, several personal factors must be studied.

A MAN'S income tax should, of course, be considered. The provisions of his will should be skilfully met. Each new investment should make a balance with his present investments. His personal plans, too, may be important. For example: Is he in business? Does he intend to remain active? Does he plan to stay at home or to travel?

THE individual seldom has the necessary experience to fully deal with his own investment problems. Good judgment prompts him to draw on seasoned knowledge.

WITH a background of one hundred and fourteen years' financial experience, The National City Company has equipped itself to study and meet individual investment problems.

ELEVEN thousand miles of private wires keep us in direct touch with the investment centers of the country. We maintain offices in 50 leading American cities. We supplement this close touch with domestic conditions by world-wide foreign connections.

A NATIONAL CITY COMPANY representative will know how to use the equipment of the Company in your interest.

You may get in touch with a representative by addressing The National City Company, 55 Wall St., New York, or by visiting our office in your city.

The National City Company

BONDS • SHORT TERM NOTES • ACCEPTANCES



In Selecting...
**YOUR MEMORIAL
TO A LOVED ONE**
...you can provide
no tribute more
appropriate, more
inspiring than...

**Golden-Voiced
Deagan
Tower Chimes**

Deagan Chimes—played by organist
from electric keyboard.



Installed in the belfry of your Church, Deagan Chimes symbolize the memorial spirit in its deepest and most beautiful sense. Their rich, mellow tones, sending forth the familiar strains of sacred old hymns, become a daily inspiration to reverence... a priceless community asset... an enduring monument to the loved one whose memory they perpetuate.

Standard Size \$6,000 and up.
Complete descriptive literature on request.

J. C. Deagan, Inc.
EST. 1880

272 Deagan Building, Chicago, Ill.

Don't you think?

It is by no means strange that men who want "something better" in cigarettes turn to Fatima. All things considered: tobaccos, aroma, subtle delicacy, it would be extraordinary if they didn't



What a whale of a difference just a few cents make

LIGGETT & MYERS TOBACCO CO.

packing center, the trader on another market, and the student in his classroom, may understand exactly what has happened on the market.

"Practically every livestock market has its own standards, its individual preferences, and its own methods of doing business. All these matters are thoroughly understood by those on the market daily, but when an attempt is made to describe market transactions to someone at a distance, or to one who is unfamiliar with practices prevailing at that particular market, difficulties are encountered."

The confusion is due to the use of trade names and terms in different manners in different markets and even differently by different individuals on the same market. Cattle has been shipped to one market under the assumption that it was the best market, which a uniform use of description would have indicated not true.

ABOUT 75,000 TONS OF IRON ORE are lost yearly in the Birmingham, Alabama, district in the form of flue dust escaping from the blast furnaces, according to the

Saving the Iron that Goes Up the Stack

Bureau of Mines of the Department of Commerce, which has conducted a study of the subject. The loss of iron from this cause amounts to about 3 per cent of the iron mined in the district. By the use of magnetic concentrators of various kinds, it is considered that much of this loss can be prevented.

Flue dust, which results from the smelting of ores containing appreciable quantities of fines, is one of the troublesome products of iron blast-furnace practice. Gases issuing from the furnaces at a high velocity carry small particles of coke, ore, and flux into dust-collecting chambers. These particles constitute the flue dust. Losses of iron ore through the production of flue dust vary between wide limits in the different furnaces, and depend on a number of factors, such as size and design of furnace, amount of fines in the ore, the operating conditions and the blast pressure.

Blast-furnace operators of the Birmingham district keenly realize this waste. It was at their suggestion that the Bureau of Mines undertook this investigation.

Copies of Serial 2761, "Magnetic Concentration of Flue Dust of the Birmingham District," containing the detailed results of this investigation, may be obtained from the Bureau of Mines, Department of Commerce, Washington, D. C.

THE BUREAU OF FOREIGN AND DOMESTIC COMMERCE has just announced that its year book is ready for distribution. This directory contains the names of over

Commerce Year Book Ready for Distribution

9,000 associations whose scope varies from trade promotion and research work covering the entire United States to discussion of local business problems. They are classified into national, interstate, state and local lists, according to the field of their activity. The larger have been grouped together in such a way that the names of associations working on any commodity or activity can readily be found. The address and chief functions of each are given.

The directory has proved itself a valuable reference book not only for research groups but also for individual business organizations. It solves at a glance the problem of where to seek business statistics and information gathered by the many associations throughout the country.

The book may be secured from any district or cooperative branch of the Bureau of Foreign and Domestic Commerce or from the Superintendent of Documents, the Government Printing Office, Washington, D. C., for 60 cents. Its full title is "Commercial and Industrial Organizations of the United States."

An Easy Way to Subscribe

IF you are not already a subscriber to NATION'S BUSINESS, use this handy coupon. Send your check—or if more convenient we will bill you later.

To the UNITED STATES CHAMBER OF COMMERCE
WASHINGTON, D. C.

Kindly enter the name of the undersigned to receive thirty-six numbers of NATION'S BUSINESS, one each month, and, in addition, one copy each year of the official transcript containing the addresses delivered by important business and government leaders at the annual U. S. Chamber of Commerce Convention in Washington.

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The principal problem of industry today lies in the elimination of wasted time. Eliminate the confusion, the wasted steps of obsolete motor control? Modern control takes the savings out of labor cost, the major item of manufacturing expense.



Somebody must discover this in YOUR plant!

MORE than ever before in the history of America's industries, the major problem today lies in the cost of labor.

It is not a problem confined to large plants. It is not a problem alone for the small manufacturer. Nor is it the problem of any certain industry or group of industries. It is the vital problem of every manufacturer under the competitive conditions that exist for all.

Economists agree that wages must be maintained for the prosperity America now enjoys. The improved standard of living which has resulted from higher wages has been responsible in the main for the greater sale of every manufactured product.

The success of your plant hinges on the return you are able to obtain from this increased investment in labor—it hinges on the elimination of wasted time in production.

Conditions today demand careful consideration of correct motor control

Many executives make the mistake of believing their plant at maximum efficiency when they can say it is completely motorized. True, electric power with its flexibility, its ease of control, has brought a new standard of operating economy.

But motors by themselves are only brute force. The savings in labor that result—these savings that add so materially to industrial profits—come through the proper application of motors. They come through the effectiveness of correct motor control.

Look now for the wasted time in your plant! Are you burdening your men with obsolete equipment? Unless someone has been in constant touch with the rapid progress made in motor control, your plant is almost certain to have lagged behind.

Engineers with more than thirty years' experience to point out the savings possible

Many executives are making this check on their production efficiency by having the Cutler-Hammer engineers point out the equipment in their plant where modern motor control will save in labor costs.

Put the control of your motors at the hand of the operator where no time is lost. Eliminate the confusion, the wasted steps of obsolete equipment. Somebody must discover this in your plant. Why not call in these engineers today? They will counsel with your plant men or consulting engineers without charge—and the control equipment they recommend quickly pays for itself.

The CUTLER-HAMMER Mfg. Co.

Pioneer Manufacturers of Electric Control Apparatus
1251 S. Paul Avenue • Milwaukee, Wisconsin



The trend of industry is decidedly toward Cutler-Hammer Push Button Control. The button is placed right at the operator's hand—the controller itself in one safe, convenient location. Saves time, affords better control and provides greater safety—a logical step in advance.

Have you received your copy of "Industry's Electrical Progress"? It reveals the way to many savings while increasing through the use of correct motor control. You will be interested. Write for a copy today.

CUTLER HAMMER

Industrial Efficiency Depends on Electrical Control

APPRAISAL WORK WANTED

*The Hardest
Most Difficult
Most Complicated*

A Record that speaks for itself

1920

The Idea—A Vision of Appraisal Work Production at Low Cost.

1924

Practical Application of Theory

1500 Industrial Building Appraisal Reports, Delaware County.
2500 Industrial Building Appraisal Reports, Hardin County.

1925

Copyrighted Appraisal Forms and Production Systems

38,000 Appraisal Reports, LAKE COUNTY

\$40,000.00 Appropriation
\$30,000.00 Cost

1926

SAVED \$10,000.00

75,000 Appraisal Reports in Production

Betts Burton Appraisal Co.

TRUE
VALUES
ONLY

Columbus Ohio



If Your Office Had No Doors or Windows

If no doors or windows were needed within the office, it will probably be cheaper to subdivide it with plaster walls than to use Circle A Partitions. It is self-evident that any layout calls for doors into the various divisions, and in almost all offices, it is necessary to make use of borrowed light. When the cost of placing the doors or windows is considered, the cost advantage of plaster partitions quickly disappears.

You will then find that Circle A Partitions sectional and movable are not only better, but also cheaper.

CIRCLE A PRODUCTS CORPORATION

Circle A Partitions are sectional and movable, and can be rapidly erected to make any desired arrangement. You can use them over and over again, and change the office layout to meet the constantly changing needs of business.

They also bring to the office the handsome appearance of fine woodwork that can only be achieved by master craftsmen with modern tools, working in fine woods.

We will gladly send our new catalogue to anyone interested.

658 South 25th Street, Newcastle, Indiana

CIRCLE A PARTITIONS



I RECENTLY asked an automobile manufacturer if he foresees any revolutionary changes in automobiles within the next year or so.

"I don't think there will be any revolutionary change within a single year," he said, "because it would be too dangerous. Even if manufacturers had a warren of new mechanical ideas, it would be unwise to introduce them too rapidly, for the public dislikes novelty. A little novelty is necessary to progress but it must come in the small doses that the public is capable of absorbing. If the public thinks that the automobile of next year may be radically in advance of anything we have now, naturally everybody would wait until next year to buy. That would be fatal to business."

Customers must have the comfortable feeling that while there will be gradual improvements each year, a car only a year old will not be out of date."



A MANUFACTURER of road building material tells me that it is almost impossible to carry on practical experiments on a large scale to show what kind of material will give the best service for a given locality.

"Politicians," he says, "are always certain to step in and do all they can to prevent anyone from finding out what kind or brands of material are best. They don't want such facts known—because they wish to be free to award contracts for whatever material best suits their own purposes."

WHEN electric lights first came into use, gas companies assumed that the new light would hurt their business. But instead of hurting them, the new electric light actually increased the use of gas.

People became so used to brighter streets and stores that they began to stay up longer after dark and needed more light in their homes.

A. ATWATER KENT, manufacturer of radios and electrical apparatus for automobiles, believes that so-called efficiency schemes in business have reached the silly stage.

"What we need," he once remarked, "is fewer filing cabinets and more wastebaskets."

Yet I noticed that the division of labor

in his factory was according to the most advanced methods of standardization. Where two holes are to be bored in a radio cabinet, one man bores each hole as the set passes by him.

The belt assembly system even carries the sealed boxes of goods into express cars for shipment.

A NATIONAL advertiser, after a long series of experiments, has figured out that white space in an advertisement has value in gaining attention up to 60 per cent. Beyond 60 per cent the cost of white space increases more rapidly than attention value.

IN DETROIT recently I heard the story of why Henry Ford is so bitterly opposed to any changes in the fundamental mechanism of his popular little car. Years ago he was continually making slight alterations, and this complicated buying of material as well as manufacturing processes.

One of his associates went to Mr. Ford with a sheet of figures showing an estimate



of the saving that could be made in buying and manufacturing if he would let the design alone for a time. Mr. Ford was so charmed with the figures, according to the story, that he gave the plan a trial. The saving was much greater than the man had estimated, and Mr. Ford became so enthusiastic over the possibilities from letting the car alone that he began to lean backward.

A FEW weeks ago, in Detroit, I saw several leading manufacturers of automobiles, bitter rivals in business, playing a friendly golf game. It isn't only that they like each other personally. They find that all have a better chance to make money if they occasionally swap ideas and know what is going on in one another's minds. In that way they better understand the industry as a whole.

BIG BANKS sometimes have more robberies—from the inside—than they ever make public. They would rather stand a loss of a few thousand dollars than publicly prosecute a dishonest employee and thus confess that money in their care is not safeguarded beyond all possibility of theft.

One bank in an eastern city had nine employees known to have stolen money last year, and each of the men was married. Each blamed his wife's desire for a larger and better automobile as an underlying cause of his dishonesty.

NOT caring for the publicity that would follow having a certain employee prosecuted in the courts, one bank tried a different method of bringing him to justice. An officer of the bank was also head of a large manufacturing business. He gave the dishonest employee an opportunity to avoid prison by working in that factory—in a position where he wouldn't handle money—and pay back out of his salary as much as he could of his defalcations.

Then a surprising thing happened: The former bank clerk proved to be a manufac-



Scarecrow methods never frightened FIRE!

EACH night when you go home, do you lock papers vital to the conduct of your business, behind ancient scarecrow barriers? Or have you the modern protection of an ART METAL SAFE?

The Tests of the Underwriters' Laboratories
Prove Art Metal—SAFE.



The Underwriters' Laboratories Labels,—Class A-T 20 or Class B-T 20 are your assurance of tested protection in all ART METAL SAFES.

"Mono-Dry" Insulation is used in all Art Metal Safes. Its resistive powers are permanent. This "dry-moisture" insulation is proof against sweating, corrosion or dampness of safe contents even when closed for months. At normal temperatures no moisture is given off. At fire temperatures it sets up a stubborn unconquerable resistance that defies penetration of heat to the interior.

All ART METAL SAFES—Class "A" and Class "B"—carry the Underwriters' Laboratories T-20 Burglary Rating. Coupled with super fire-resistance the burglary rating means that Art Metal Mono-Dry Insulated Safes deliver complete protection.

Send today for the ART METAL Safe Catalog, an answer to every risk surrounding your records. Use the Coupon.

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STEEL Office Equipment, Safes and Files

JAMESTOWN, NEW YORK

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Art Metal Construction Co., Jamestown, N. Y.

Please send your new Safe Catalog.

Name _____ Firm Name _____

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The Better Wage

A New Ernst & Ernst Booklet
For Manufacturing Executives and Bankers

Group Bonus Labor Payment is a simple, practical plan whereby labor receives higher wages, while the manufacturer cuts his costs and secures better control.

When a manufacturer pays workmen for the result of their individual operations instead of for the results of *cooperation* or group effort, he must provide a substitute for cooperation in the form of close supervision and complicated accounting. He must realize that his substitute is at best a poor one because of the expense of it and the wasted time, wasted materials and other wastes, which he can not control.

"The Better Wage," a new Ernst & Ernst booklet of 32 pages, is a concise analysis of Group Bonus Labor Payment prepared for the consideration of Management. There are no expansions of argument, untried theory or technical detail. The text is confined to the simple essentials of adequate and dependable information arising from successful experience.

Free to executives on request. Address nearest office.

ERNST & ERNST

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turing genius who had previously missed his calling. He learned about manufacturing processes so rapidly that at the end of a year he was able to introduce labor-saving devices that saved the company a considerable sum. Later he received a share of these savings and by this means has been able to repay most of the money he stole. He is so interested in his new job that those in touch with the situation have no fear about his honesty from now on. It is even possible that he will some day be at the head of the manufacturing concern. All of which seems to indicate that he may not have been a thief at heart, but suffered under the handicap of being an occupational misfit. He shouldn't have been in a bank in the first place.

DR. ELTON MAYO, of the Wharton School, University of Pennsylvania, has been working on a theory that radicalism in factory employees is, at least, partly a question of physical condition. If a man is



overtired he becomes pessimistic, irritable and willing to stir up trouble. This is especially true if the man is employed at a job that doesn't require all his thought. Mayo believes that destructive thinking may be greatly reduced if men are given opportunity to sit down or lie down oftener.

In one factory where the labor turnover was high and output low, it was observed that nearly all the workers were obliged to remain a long time on their feet. To remedy this, the management introduced rest-pauses—four in a ten-hour day, in which all workers were asked to lie down and were even instructed in the best method of relaxation. Soon the whole crowd became more cheerful and their output noticeably increased.

READY-MADE garment manufacturers agree, in general, on styles. While rival companies have individual designs, the various companies meet and exchange designs in the preliminary stages, to the end that in a general way styles for each season shall be in agreement. If a woman saw a dozen different styles when she set out to buy a fall outfit, she would be so uncertain which is correct that she would be afraid to buy any.

THERE'S an old saying among retail florists that if a customer asks for glad-i-o-lus with the accent on the *i*, it is safe to



charge him more than if he accented the *o*. The difference is that one pronunciation is common and ordinary; the other is more exclusive and Ritzzy.

TOTALLY DIFFERENT Hauserman MOVABLE STEEL PARTITIONS

SENSATIONAL PRICES

Standardized production by largest manufacturer makes this possible. Branches in principal cities. Ask for "Architects' Portfolio".

THE E.F. HAUSERMAN COMPANY - 6811 GRANT AVE. CLEVELAND

When writing to ERNST & ERNST and THE E. F. HAUSERMAN COMPANY please mention Nation's Business

The Graybar Tag, under which
60,000 electrical supplies are shipped



Exploding that mouse-trap in the woods

EMERSON'S famous mouse-trap statement was right as far as it went. But it's costly for the world to keep making beaten tracks to the doors of inventors in the woods. The Graybar system of distribution is the modern path between maker and user of electrical supplies—to the convenience and economy of both.

As buyer for industry, Graybar, with its great facilities, resources and experience, fetches quality electrical supplies "out of the woods"—making 60,000 items available, through 58 warehouses, to the user whenever and wherever he may want them.

The Graybar catalog is a veritable encyclopedia of everything electrical. We shall be very glad to send a copy to wholesale buyers of electrical supplies. Please write on your business letterhead.

Graybar Electric Co.

Executive Offices: 100 East 42nd Street, New York City

To Use Paper Economically It Must First Be Bought—*Intelligently*



INCREASING costs are making buyers more paper conscious. Where formerly they took paper for granted, now they give it a second thought—and a third. Whether you operate a factory or conduct a retail store it pays to ask yourself a few questions about such an apparently simple basic commodity as paper. For instance: Just how strong must the paper be for each use? (There are more than 150 grades of strength.) Must it resist moisture or grease? Must it be agreeable to the touch? Must it take print? Must it be of distinctive appearance? Many paper buyers are paying for qualities they don't really need. Every misuse of paper is a form of waste and in large establishments the total amounts up surprisingly.

Continental's eleven mills make all grades of wrapping paper and paper bags. Each best serves a particular need. There are fine shades of difference even in coarse papers and the price is governed by these differences. Continental makes a paper for every industrial and commercial need, but do you as a paper buyer really know exactly what you need?

In the interest of a more efficient use of paper, Continental is glad to make available to purchasing agents and executives the expert advice of its laboratory staff in determining what paper and bags best meet their requirements. For assistance in creating or revising specifications write direct to us.

* * * * *

No progressive merchant can afford to be indifferent to the appearance of the package which goes out of his store. It is a link with the customer and as such deserves careful thought. Many stores have adopted a distinctive paper of pleasing texture which is in itself an advertisement. They make the paper pay for itself. Continental is the only organization which can meet the complete requirements of the store, regardless of size, which wishes to enjoy the advantages of a uniformly colored and printed wrapping service.

There is a Continental wholesaler in your territory. He knows paper. He can help you make every package do its bit toward building up your business.

Continental Makes

WRAPPING PAPER—of all types, grades, weights and finishes—plain, printed or decorated for all commercial purposes.

TISSUE PAPERS—all types, white and colored.

PAPER BAGS—Grocer, Hardware, Notion, Candy Bags, Paper Sacks, Shopping Bags, Duplex (Lined) Bags, Merchandise Envelopes, Glassine Bags and Envelopes—printed or unprinted—plain, decorated or embossed paper. All weights, sizes and colors for all purposes.

ENVELOPES—Open End, Plain and Stringite for mailing, etc.

TOILET PAPERS—PAPER TOWELS—in rolls or interfolded—**PAPER NAPKINS**—in Glassine wrapped packages, or bulk, flat, quarters folded or cornucopia folded.



CONTINENTAL PAPER & BAG MILLS CORPORATION



FOREMOST SPECIALISTS IN
WRAPPING PAPER AND BAGS

Executive Offices - 100 East 42nd Street, New York
11 Mills—28 Branches—3 Printing Plants—and Experience

Continental turns out approximately nine hundred thousand pounds of paper each working day



TRUE BLUE ^(HEAT PROOF) INNER TUBE

The first inner tube to successfully withstand the "burning-up" from constant flexing under heavy loads and high speeds.



As flabby and lifeless as old rotted leather. Easily torn with the hands.



**INDIA
TRUE-BLUE
Inner Tube**
*As tough and lively
as when placed in
the casing.*



This actual service test again proves the striking superiority of the TRUE-BLUE (HEAT-PROOF) inner tube under present high-speed, low-pressure, heavy load running conditions.

A new TRUE-BLUE tube and a new heavy red tube of standard make and equal price were placed, at the same time, on one of the buses of an important California bus line. When the red tube "blew out" they were both removed. The effects of this equal service on the two tubes are shown above.

Service tests like this combined with the standard laboratory aging tests, prove TRUE-BLUE tubes to be truly heat-proof—and by long odds the greatest improvement that has been made in inner tubes in recent years.

This is one of many exclusive INDIA features which enable car owners, bus and truck operators to get unusual records of uninterrupted mileage from INDIA tires.

INDIA
TRUE BLUE
HEAT PROOF
INNER TUBES



The INDIA dealer franchise is an extremely valuable concession on which to build a successful tire business. Inquiries are solicited from men or concerns who may be interested in this franchise for certain open territories.

INDIA TIRE & RUBBER CO., AKRON, OHIO.

When buying INDIA TIRES please mention Nation's Business to the dealer

When it's hunters'
day at the horse show—and the best
jumpers in the land are soar-
ing over the hedges
—have a Camel!



No other cigarette in the world is like Camels. Camels contain the choicest Turkish and Domestic tobaccos. The Camel blend is the triumph of expert blenders. Even the Camel cigarette paper is the finest—made especially in France. Into this one brand of cigarettes is concentrated the experience and skill of the largest tobacco organization in the world.

WHEN it's the most exciting day at the horse show. When the famous hunters take water jump, wall and rail in faultless performance—have a Camel!

For, all the world over, no other cigarette cheers and satisfies like a Camel. The golden enjoyment of Camels makes every happy holiday happier, adds the sense of well-being to every friendly occasion. Camels are made of the choicest Turkish and Domestic tobaccos grown—they are the cigarettes that never tire the taste, never leave a cigarette after-taste. Millions who could well afford to pay more will smoke only Camels.

So as you join the gay throngs at the horse show. After each thrilling event—know then the enjoyment of the finest in cigarettes.

Have a Camel!



Our highest wish, if you do not yet know Camel quality, is that you try them. We invite you to compare Camels with any other cigarette, made at any price.

R. J. Reynolds Tobacco Company
Winston-Salem, N. C.